33190924

ID: 88073067

HD
243
.C2
R355
1994

PLANNING DEPARTMENT

COUNTY OF SAN BERNARDINO
ENVIRONMENTAL MANAGEMENT GROUP

385 North Arrowhead Avenue • San Bernardino, CA 92415-0182 • (909) 387-4099
Fax No. (909) 387-3223

Valery Pilmer
Director of Planning

July 29, 1994

RESPONSIBLE AND TRUSTEE AGENCIES
INTERESTED ORGANIZATIONS AND INDIVIDUALS

RE: NOTICE OF AVAILABILITY OF THE FINAL EIR/EIS AND MITIGATION MONITORING AND COMPLIANCE PROGRAM FOR THE RAIL•CYCLE BOLO STATION LANDFILL PROPOSAL

Dear Reader/Reviewer:

Enclosed are the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) and Mitigation Monitoring and Compliance Program (MMCP) for the Bolo Station Landfill proposed by Rail-Cycle. The FEIR/EIS contains responses to public and agency comments received on the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) and the Supplement to the DEIR/EIS for the Bolo Station Landfill. The MMCP contains the mitigation measures that have been recommended in the EIR/EIS and describes how each measure will be implemented and verified.

The DEIR/EIS and Supplement identified and described the probable environmental impacts that would result from the proposal to site a Class III municipal solid waste landfill on approximately 4,800 acres located near Bristol Dry Lake, approximately 3 miles southeast of the community of Amboy in San Bernardino County.

The DEIR/EIS and the Supplement were previously distributed for public review to interested individuals, local organizations and agencies, and public libraries. The comment periods for the DEIR/EIS and the Supplement ended on March 03, 1993, and February 21, 1994, respectively.

This document has been prepared as a joint EIR/EIS to meet the requirements of the California Environmental Quality Act and the National Environmental Policy Act. The FEIR/EIS, DEIR/EIS and Supplement have been prepared by Environmental Solutions, Inc., an independent environmental consultant under the supervision of the County of San Bernardino and the U.S. Department of the Interior, Bureau of Land Management.

Sincerely,

Randy Scott

RANDY SCOTT, Senior Planner
Environmental Team, Planning Department
San Bernardino County

Henri R Bisson

HENRI R. BISSON, District Manager
Bureau of Land Management
U.S. Department of the Interior

BLM Library
Denver Federal Center
Bldg. 50, OC-521
P.O. Box 25047
Denver, CO 80225

COVER SHEET

FINAL ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT
RAIL•CYCLE - BOLO STATION LANDFILL
SAN BERNARDINO COUNTY, CALIFORNIA

LEAD AGENCIES:

- San Bernardino County Planning Department
  San Bernardino, California
- U.S. Department of the Interior
  Bureau of Land Management
  Riverside, California

PROPOSED ACTION:

Construction and operation of the Rail•Cycle - Bolo Station Landfill, amendment of the County General Plan and the California Desert Conservation Area (CDCA) Plan, and issuance of associated right-of-way grants, land exchange, and permits.

Written information regarding the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) should be submitted to the County of San Bernardino (County) and Bureau of Land Management (BLM) at the addresses below. For further information, contact the County or BLM at:

County of San Bernardino
Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, California 92415-0182
(909) 387-4099
Attention: Mr. Randy Scott

Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, California 92507-0714
(909) 697-5230
Attention: Mr. Doug Romoli

DESIGNATION:

Final EIR/EIS

ABSTRACT:

In August 1991, the County issued a Notice of Preparation of an EIR in response to an application submitted by Rail•Cycle for construction of a Class III municipal solid waste facility near Amboy, California, in the eastern Mojave Desert region of San Bernardino County. The BLM determined that an EIS would be required as the proposed action includes the exchange of federal lands managed by the BLM, an amendment of the CDCA Plan, and right-of-way easements across federal lands. The BLM issues a Notice of Intent to prepare an EIS for the proposed action in August 1991. In accordance with the California Environmental Quality Act and National Environmental Policy Act, the County and BLM are preparing a joint EIR/EIS.

The proposed action is a private venture (Rail•Cycle) between Atchison, Topeka, and Santa Fe Railway Company, Inc. (ATSF) and Waste Management, Inc. (WMI) involving construction and operation of a Class III nonhazardous waste landfill that would accommodate up to 21,000 tons per day. Waste would be transported by rail from various counties and cities in southern California in sealed 40- to 45-foot containers (using existing rail lines) to the proposed Bolo Station Landfill located near Amboy, California.

Alternatives to the proposed Bolo Station Landfill include:

- Cadiz Valley Alternative
- Reduced Action Alternative
- No Action Alternative

Additional alternative sites for the proposed landfill were considered, but eliminated from further analysis, as they were determined not to be feasible for one or more of the following reasons:

- Not located on a major rail line or located on rail lines with steep grades.
- Located too far from Los Angeles County.
- Currently being considered for other proposed projects.
- Located in desert tortoise habitat.
- Site was considered too small to accommodate a 21,000-ton per day operation.
- Close proximity to populated areas.
- Topographical or geologic features which made siting of a landfill inappropriate.
- Jurisdictional boundaries (i.e., Department of Defense lands).

In November 1992, the Draft EIR/EIS for the Rail•Cycle - Bolo Station Landfill was distributed to agencies, organizations, and individuals for a 90-day review and comment period (December 4, 1992, to March 3, 1993). During the review and comment period, BLM held three public hearings to obtain verbal comments on the Draft EIR/EIS. The public hearings were held in February 1993, in the cities of Barstow, Twentynine Palms, and San Bernardino, California. In addition to verbal comments received during the public hearings, the County and BLM received approximately 90 letters from agencies, organizations, and individuals providing written comments on the Draft EIR/EIS.

After circulation of the Draft EIR/EIS, revised or clarified information was developed to respond to public comments on the Draft EIR/EIS regarding several environmental issues. To respond to various issues regarding potential environmental effects of the proposed action that were not fully addressed in the Draft EIR/EIS, the County and BLM decided that a Supplement to the Draft EIR/EIS would be prepared.

The Supplement provided additional analysis/clarification of various issues, and provided an opportunity for additional public review and comment. The areas for which the Supplement provided revised or clarified information for the proposed action included:

- Purpose and need for the proposed action.
- Changes to the description of the proposed action.
- Geology and soils.
- Surface hydrology and ground water.
- Mineral resources.
- Air quality.
- Noise.

In December 1993, the Supplement was distributed to agencies, organizations, and individuals for a 60-day review and comment period (December 23, 1993, to February 21, 1994). The County and BLM received approximately 40 letters from agencies, organizations, and individuals providing written comments on the Supplement.

Various technical reports have been prepared by Rail•Cycle which have been used in the preparation of the EIR/EIS. These reports are available for review on request at the County and BLM offices listed above.

This Final EIR/EIS has been prepared in an abbreviated format in accordance with the CEQA Guidelines (CCR Title 14, Section 15132) and the Council of Environmental Quality Regulations for the Implementation of NEPA (40 CFR 1503.4[c]). As an abbreviated Final EIR/EIS, this document includes:

- A summary of the proposed action, impacts, mitigation measures, and alternatives to the proposed action.
- Comments received on the Draft EIR/EIS and Supplement, and specific responses to these comments.
- Minor changes and corrections to the EIR/EIS.

This Final EIR/EIS is being distributed for a 30-day notification period by the BLM and a 10-day notification period by the County. The BLM notification period begins on August 12, 1994 and ends on September 12, 1994. The County notification period begins on August 1, 1994 and ends on August 10, 1994. Written information regarding the Final EIR/EIS should be submitted to the BLM and the County at the above addresses prior to the end of their respective notification periods.

After the 10-day County notification period, the County Board of Supervisors will consider the complete administrative record for the EIR/EIS and will hold a public hearing regarding certification of the EIR. If the County Board of Supervisors determines that the EIR has complied with CEQA, it will certify the EIR as being complete and will adopt specific findings regarding the proposed project, appropriate statements of overriding consideration for significant unavoidable adverse impacts, and the Mitigation Monitoring and Compliance Program. Upon certification of the EIR by the County Board of Supervisors, a Notice of Determination would be filed by the County.

The proposed amendment of the CDCA Plan to change the multiple-use designation Class "L" to Class "M" for Section 15 and the western-half of Section 22 at the proposed Bolo Station site is the BLM's preferred alternative. The proposed amendment of the CDCA Plan is a planning action by the BLM and involves a separate decision by the BLM as that required for the proposed land exchange and issuance of right-of-way easements. The 30-day BLM notification period for the Final EIS is also the protest period for the proposed amendment of the CDCA Plan. There are no provisions for any extension of the protest period. The procedures for filing a protest of the proposed amendment of the CDCA Plan are included as Appendix A to this Final EIR/EIS. At the end of BLM's notification period for the Final EIS and the protest period for the proposed amendment of the CDCA Plan, the BLM can issue its Record of Decision for the EIS.

This Final EIR/EIS has been approved for public distribution.

Henri R Bisson

Henri R. Bisson
District Manager
California Desert District
U.S. Bureau of Land Management

7/8/94
Date

Valery Pilmer

Valery Pilmer
Planning Director
County of San Bernardino

7/8/94
Date

TABLE OF CONTENTS
FINAL EIR/EIS

	PAGE NO.
LIST OF TABLES/LIST OF FIGURES	iii
SUMMARY	S-1
S.1 Introduction	S-1
S.2 Project Background	S-1
S.2.1 Waste-by-Rail System	S-1
S.3 Purpose and Need	S-1
S.4 Proposed Action	S-3
S.5 Summary of Potential Environmental Consequences	S-6
S.6 Alternatives to the Proposed Action	S-10
S.6.1 Selection of Alternatives	S-10
S.7 Intended Uses of the EIR/EIS	S-13
S.8 Final EIR/EIS Requirements	S-14
S.8.1 Contents of this EIR/EIS	S-17
S.8.2 EIR/EIS Process	S-17
S.9 Final EIR/EIS Format	S-18
1.0 CHANGES AND CORRECTIONS TO THE EIR/EIS	1-1
1.1 Changes to the Draft EIR/EIS	1-1
1.2 Changes to the Supplement	1-2
1.3 Revised Tables and Figures	1-2
2.0 SPECIFIC RESPONSES TO COMMENTS ON THE DRAFT EIR/EIS	2-1
2.1 Federal Agencies Comments and Responses	2.1-1
2.2 State/Regional Agencies Comments and Responses	2.2-1
2.3 County/Local Agencies Comments and Responses	2.3-1
2.4 Businesses/Organizations Comments and Responses	2.4-1
2.5 Individuals Comments and Responses	2.5-1
2.6 Petitions/Public Hearing Transcripts Comments and Responses	2.6-1
3.0 SPECIFIC RESPONSES TO COMMENTS ON THE SUPPLEMENT	3-1
3.1 Federal Agencies Comments and Responses	3.1-1
3.2 State/Regional Agencies Comments and Responses	3.2-1

TABLE OF CONTENTS
FINAL EIR/EIS
(Continued)

PAGE NO.

3.3 County/Local Agencies Comments and Responses 3.3-1

3.4 Organizations Comments and Responses 3.4-1

3.5 Individuals Comments and Responses 3.5-1

4.0 TERMS AND ABBREVIATIONS 4-1

4.1 Definition of Terms 4-1

4.2 Definition of Abbreviations 4-6

5.0 LIST AND QUALIFICATIONS OF PREPARERS 5-1

6.0 ORGANIZATIONS AND PERSONS CONSULTED 6-1

7.0 FINAL EIR/EIS DISTRIBUTION LIST 7-1

8.0 REFERENCES AND RESOURCES 8-1

8.1 Background Technical Reports 8-1

8.2 References 8-6

APPENDIX A: PROCESS FOR PROTESTING AMENDMENT TO THE CALIFORNIA DESERT CONSERVATION AREA PLAN

APPENDIX B: AIR QUALITY CALCULATIONS FOR FEDERAL RIGHT-OF-WAY EASEMENTS

APPENDIX C: CALIFORNIA DEPARTMENT OF FISH AND GAME LETTER: SECTION 1600 STREAMBED ALTERATION

APPENDIX D: SAN BERNARDINO COUNTY GEOLOGIST MEMORANDUM CONCURRENCE WITH GEOLOGIC REVIEW

APPENDIX E: GEOLOGIC AND SEISMIC REFERENCES AND OVERVIEW TABLE

TABLE OF CONTENTS
FINAL EIR/EIS
(Continued)

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
S.1	Summary Comparison of Impacts for the Proposed Action and Alternatives	S-20
S.2	Mitigation Measures and Summary of Significant Unavoidable Adverse Impacts	S-29
S.3	Overview of Public Issues and Agency Comments - Draft EIR/EIS and Supplement	S-45
1.1	Mitigation Measures Refined or Eliminated Since the Draft EIR/EIS	1-5
4.7.6	Air Quality Measurement Summary Bolo Station Site	1-14
6.1	Projects in Cumulative Impact Study Region	1-15
G.4	Reptiles Known and Expected in the Vicinity of The Bolo Station Site	1-16
G.5	Birds Known and Expected in the Vicinity of the Bolo Station Site	1-17
G.6	Mammals Known and Expected in the Vicinity of the Bolo Station Site	1-19
2.1	List of Commenters on the Draft EIR/EIS	2-2
3.1	List of Commenters on the Supplement	3-2
8.1	Background Technical Reports	8-2
E.1	Geologic and Seismic References	F.1-1
E.2	Summary Review of Vicinity Faulting	F.2-1

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
S.1	Regional Location Map	S-2
S.2	Site Vicinity Map	S-4
S.3	Site Location Map	S-5
S.4	Plan View Bolo Station Site	S-7
S.5	Location of Lands Offered for Exchange for Onsite BLM Lands	S-9
S.6	Southern California Desert Regional Project Alternatives	S-11
S.7	San Bernardino County Desert Regional Alternatives	S-15
5.2.1	Location of Recent Seismic Activity	1-3
4.2.2	Total Dissolved Solids Concentrations in Ground Water	1-13
3.1	Refined Plan View Bolo Station Site	B-19

SUMMARY

SUMMARY

S.1 INTRODUCTION

1. This Final Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) has been prepared by the County of San Bernardino (County) and the U.S. Bureau of Land Management (BLM) to respond to public and agency comments on the Rail•Cycle-Bolo Station Landfill November 1992 Draft EIR/EIS, and the December 1993 Supplement to the Draft EIR/EIS (Supplement). Evaluation and response to public and agency comments is an essential part of the full disclosure environmental review process for both the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), and has been completed in accordance with California Public Resources Code §2100 *et seq.* and 42 U.S.C. §4321 *et seq.*

S.2 PROJECT BACKGROUND

1. The proposed action, a private venture by Rail•Cycle, a limited partnership between the Atchison, Topeka, and Santa Fe Railway Company, Inc. (ATSF) and Waste Management, Inc. (WMI),(1) includes the rail transport of up to 21,000 tons per day of non-hazardous municipal solid waste from various cities and counties in southern California, and the construction and operation of a large capacity (2,100 acres), long-term (60- to 100-years), Class III landfill facility. The proposed Bolo Station Landfill, its supporting facilities, and buffer zone are proposed to be located on an approximate 4,870 acre site in a rural area of the Mojave Desert near the community of Amboy in San Bernardino County, California (see Figure S.1).

S.2.1 WASTE-BY-RAIL SYSTEM

1. The proposed action is comprised of two components: (1) the rail transport of waste in sealed containers using existing rail lines; and (2) disposal of solid waste at the proposed Bolo Station Landfill.

2. Rail•Cycle's waste-by-rail system would obtain waste from approved materials recovery facilities (MRFs). The MRFs are not part of this proposed action and are not discussed in detail. Site-specific permitting and approval, including CEQA compliance, would be conducted for each MRF.

3. While not part of the proposed action, up to seven MRFs in southern California may support Rail•Cycle. These MRFs would assist the waste-generating communities in meeting the waste reduction requirements of the California Integrated Waste Management Act of 1989, also known as Assembly Bill (AB) 939. MRFs that may support the Rail•Cycle system are anticipated to be located adjacent to existing rail lines.

S.3 PURPOSE AND NEED

1. The proposed Bolo Station Landfill is designed to provide waste disposal services in the southern California region for 60- to 100-years. Rail•Cycle proposes to develop a waste-by-rail system at the Bolo Station Landfill, which would accept up to 21,000 tons per day of solid waste that has undergone recycling and reduction. The proposed landfill has the ability to:

   - Serve a number of different municipalities and counties in southern California through a series of locally-sited and permitted MRFs to assure that recyclable materials and unacceptable wastes (e.g., hazardous, medical) are removed from the waste stream prior to landfilling.
   - Provide a long-term disposal option.

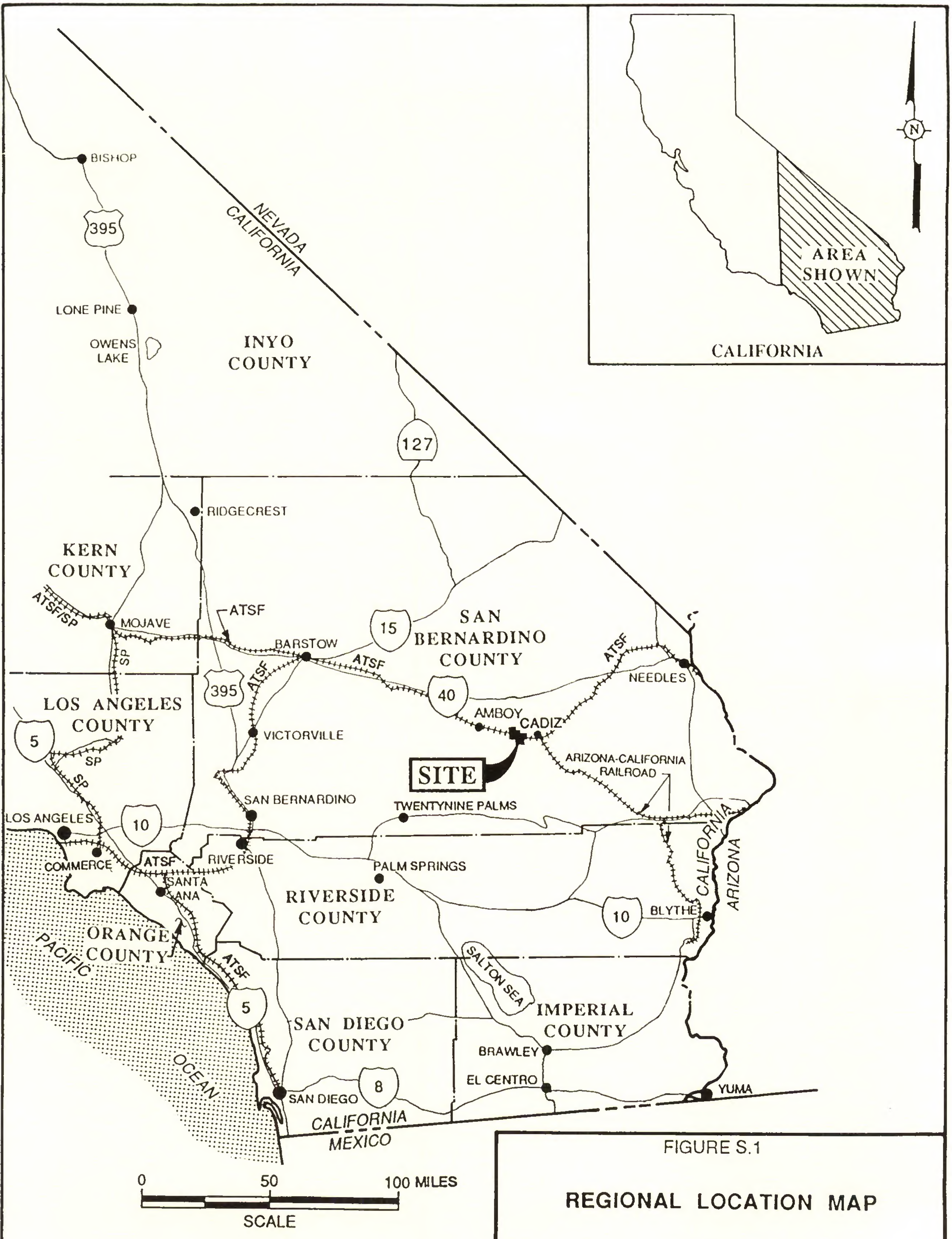
2. Various southern California communities are approaching a waste disposal shortfall as current landfills are reaching capacity and siting of new landfills in or near urban areas has become increasingly difficult due to land use compatibility and environmental issues. Of the southern California counties, Los Angeles County is expected to run out of landfill capacity first (CIWMB, 1992).

3. Other southern California counties (e.g., San Bernardino, Riverside, San Diego, Orange, etc.) are projected to run out of landfill capacity in the next 6 to 18 years (CIWMB, 1992). These counties have a longer planning time frame, and

---

(1) In May 1993, Waste Management of North American, Inc. (WMNA) became known as Waste Management, Inc. (WMI). Any reference in this Final EIR/EIS to WMNA actually refers to WMI.

91-109 FEIR/EIS REV. 05/15/94



LEGEND

ATSF — ATCHISON, TOPEKA, AND SANTA FE RAILROAD

SP — SOUTHERN PACIFIC TRANSPORTATION COMPANY

FIGURE S.1

REGIONAL LOCATION MAP

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

the proposed Bolo Station Landfill may be considered as a long-term disposal option for a portion of the waste stream for these counties in the near future.

4. Regarding landfill capacity in San Bernardino County, the County has 17 active landfills that can meet the in-County requirements for solid waste disposal for approximately the next eight years. To meet the long-term disposal needs of the County, Rail•Cycle would, depending on reaching specific agreements with the County and the cities within the County, provide up to 6,000 tons a day of waste capacity at the Bolo Station Landfill for in-County waste. This capacity would be sufficient to dispose of the total volume of municipal solid waste currently requiring disposal in the County.

5. The objectives of the proposed action are to:
   - Develop a new privately owned and operated Class III solid waste disposal facility to provide a long-term option to various cities and counties in southern California to meet a portion of their projected demand for municipal solid waste landfill space.
   - Develop long-term municipal solid waste landfill capacity in a remote desert setting to: (1) provide a state-of-the-art landfill to dispose of the residual waste following source reduction and recycling programs; (2) minimize land use compatibility conflicts often faced by landfills sited near residential or other urban areas; and (3) minimize potential environmental impacts, especially in the areas of air and water quality, as these effects would be reduced in an arid environment.

S.4 PROPOSED ACTION

1. The proposed landfill site consists of approximately seven and one-half sections of land near Bristol Dry Lake, south of the Bristol and Marble mountains. It is located midway between Cadiz and Amboy, along the ATSF rail line, as shown in Figures S.2 and S.3. Of the 4,870 acres included in the proposed site, 2,100 acres would be used for landfilling and 300 acres would be used for support facilities. The remaining 2,470 acres would be used as a buffer zone.

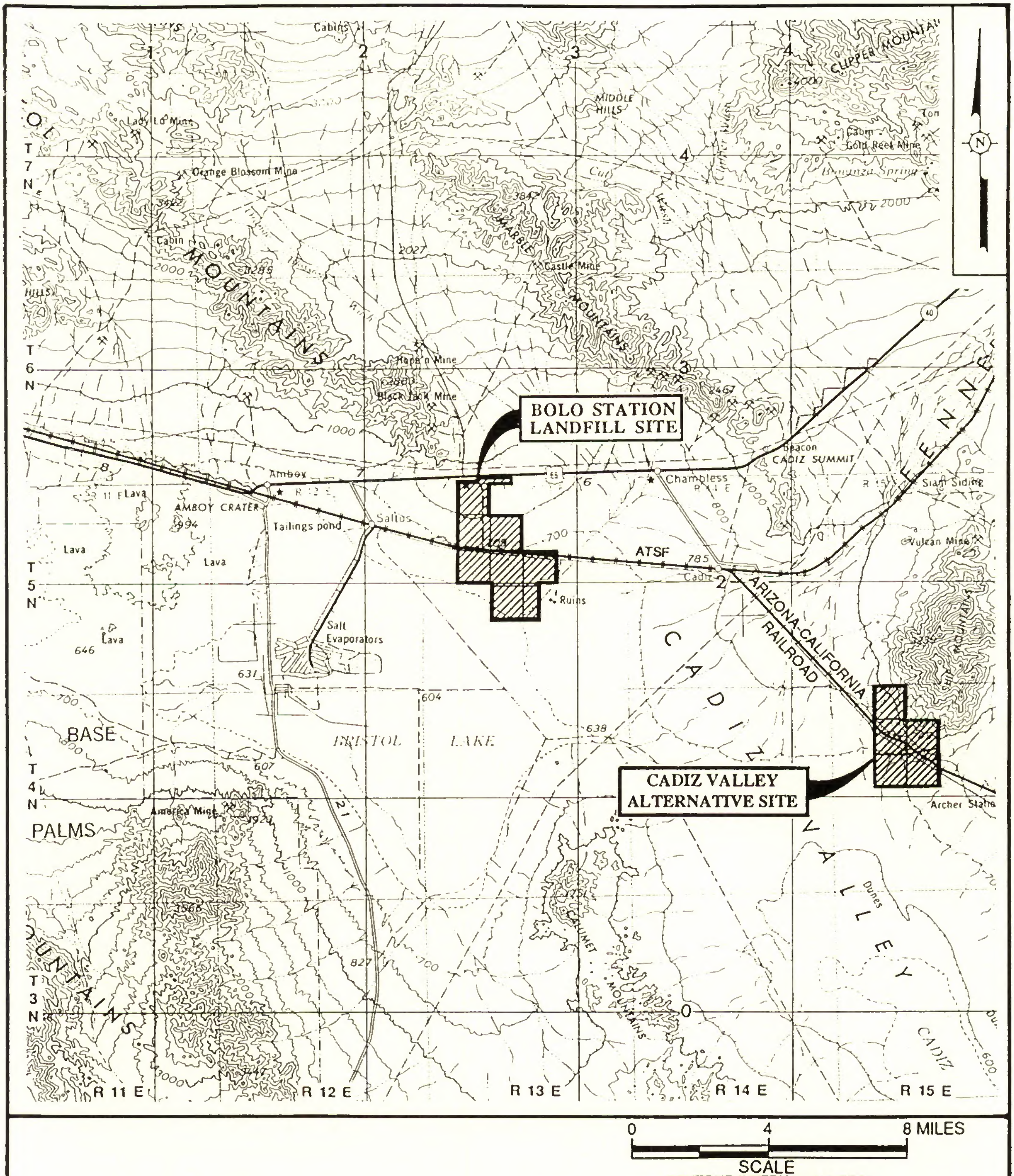
2. The proposed footprint for the Bolo Station Landfill is shown in Figure S.4. As shown in the figure, the 2,100 acre landfill is divided into 45 landfill cells. The locations of the administration/visitor's center, public waste drop-off facility, landfill operation and maintenance area, and railyard offloading facility are also shown in this figure.

3. As the proposed landfill is in San Bernardino County, the proposed action would require an amendment of the County General Plan and issuance of a Conditional Use Permit (CUP). The proposed action would also require various other permits from the County.

4. As the proposed landfill includes public lands managed by the BLM, the proposed federal action and the BLM's preferred alternative includes the following:
   - Amendment of the California Desert Conservation Area (CDCA) Plan to redesignate one and one-half sections of federal lands from Class "L" to Class "M" within the Bolo Station site.
   - Exchange in fee of surface and subsurface rights, including mineral rights, on two and one-half sections of federal land within the site (i.e., Sections 8 and 15, and the western one-half of Section 22) for surface and subsurface rights on three sections of land owned by ATSF or Rail•Cycle.
   - Granting of an approximate 25- by 1,200-foot right-of-way across federal lands to provide a power line easement to the site.
   - Granting of an approximate 800- by 2,640-foot temporary right-of-way across federal property bordering Route 66 to provide construction access to the site for a period of two years.

5. The BLM has selected three noncontiguous sections of land owned by ATSF or Rail•Cycle for exchange: one located at the northeast corner of the Cadiz Dunes; one in Piute Valley; and one in the Fenner Valley/Providence Mountains (see Figure S.5).

91-109 FEIR/EIS REV. 6/28/94



CONTOUR INTERVAL: 200 FEET

FIGURE S.2

SITE VICINITY MAP

RAIL•CYCLE
BOLO STATION LANDFILL

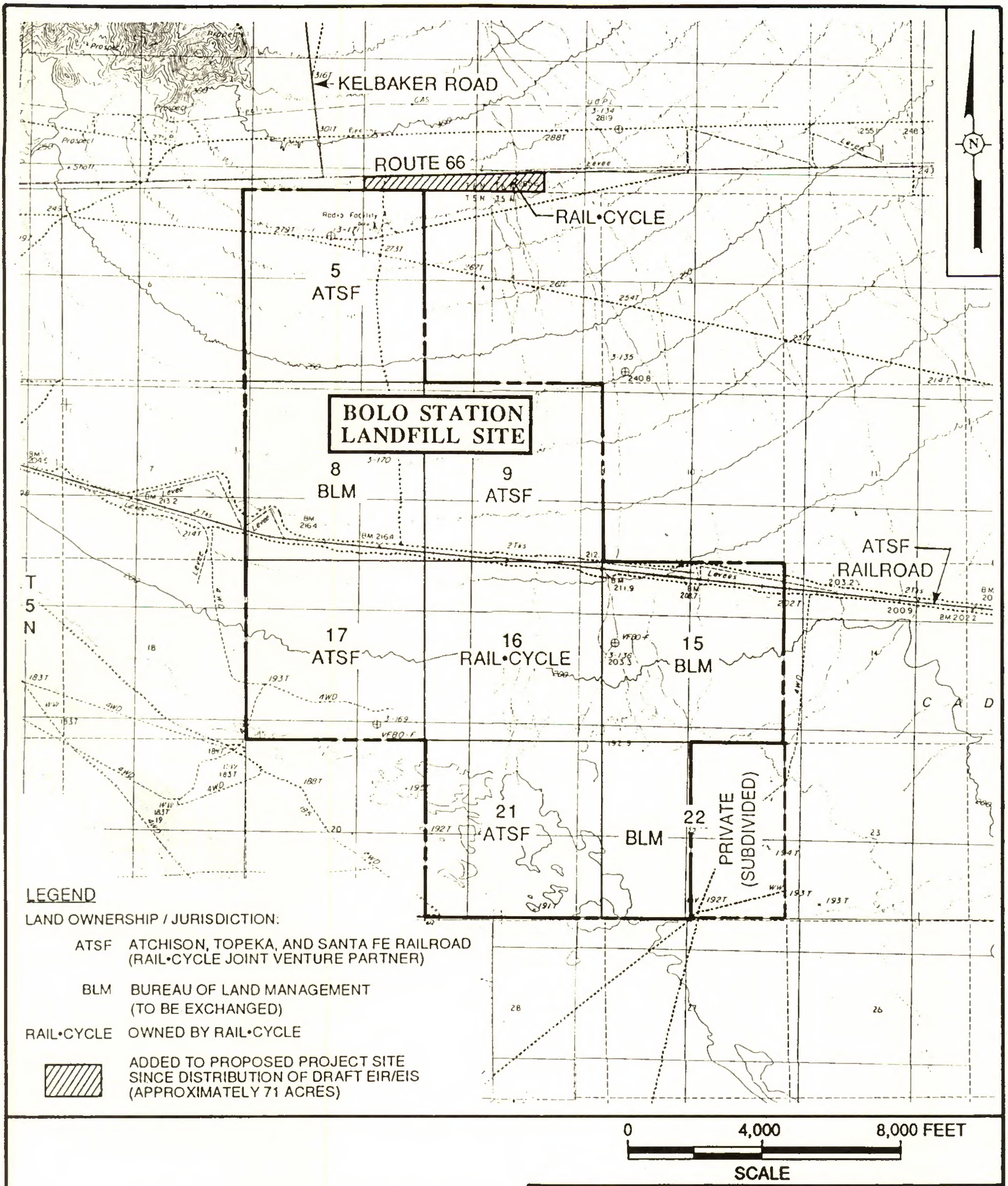
ENVIRONMENTAL SOLUTIONS, INC.

LEGEND

ATSF	ATCHISON, TOPEKA, AND SANTA FE RAILROAD

REFERENCE: U.S.G.S. 1 X 2 DEGREE TOPOGRAPHIC QUADRANGLE MAP OF NEEDLES, SAN BERNARDINO COUNTY, CALIFORNIA. DATED 1956 AND REVISED IN 1969.

91-109 FEIR/EIS REV. 6/28/94



LEGEND

LAND OWNERSHIP / JURISDICTION:

ATSF	ATCHISON, TOPEKA, AND SANTA FE RAILROAD (RAIL•CYCLE JOINT VENTURE PARTNER)
BLM	BUREAU OF LAND MANAGEMENT (TO BE EXCHANGED)
RAIL•CYCLE	OWNED BY RAIL•CYCLE
▨	ADDED TO PROPOSED PROJECT SITE SINCE DISTRIBUTION OF DRAFT EIR/EIS (APPROXIMATELY 71 ACRES)

REFERENCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE MAPS OF AMBOY, BRISTOL LAKE NW, CADIZ, AND CALUMET MINE, SAN BERNARDINO COUNTY, CALIFORNIA. AMBOY, CADIZ, AND CALUMET MINE ARE PROVISIONAL EDITION MAPS AND ARE DATED 1985. BRISTOL LAKE NW IS DATED 1954 AND PHOTOREVISED IN 1984.

NOTE: PROVISIONAL EDITION MAPS SHOW CONTOUR INTERVALS, SPOT ELEVATIONS AND U.T.M. COORDINATES IN METERS. BRISTOL LAKE NW IS ON THE DATUM FOR 1927. CONTOUR INTERVALS AND SPOT ELEVATIONS ARE MEASURED IN FEET.

FIGURE S.3

SITE LOCATION MAP

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

6. Since the distribution of the Draft EIR/EIS, refinements have been made to the proposed action. These refinements were addressed in the Supplement and include:

   - The addition of 70 acres to the proposed action increasing the overall size of the project site to 4,870 acres as compared to 4,800 acres identified in the Draft EIR/EIS (see Figure S.4).
   - Relocation of the proposed onsite water well from Section 9 to Section 33 (see Figure S.4).
   - Reconfiguration of the administrative/visitor's center, public waste drop-off facility, and the operations and maintenance area (see Figure S.4).
   - Refinement of the southwest corner of the landfill footprint to protect the landfill from the 100-year floodplain (see Figure S.4).
   - Refinement of the landfill liner system to include a double-composite flexible membrane liner and a an unsaturated (vadose) zone monitoring (UZM) system.
   - Rail•Cycle shall construct a new County fire/paramedic/sheriff station at the entrance to the proposed landfill (see Figure S.4).
   - Refinement of the topsoil component of the final cover system for the landfill to include 2- to 3-feet of soil as compared to 1 foot discussed in the Draft EIR/EIS. The increase in thickness of the topsoil will improve the revegetation plan for the landfill that consists of native plant species.

   These refinements do not result in changes to the environmental impacts addressed in the Draft EIR/EIS and Supplement.

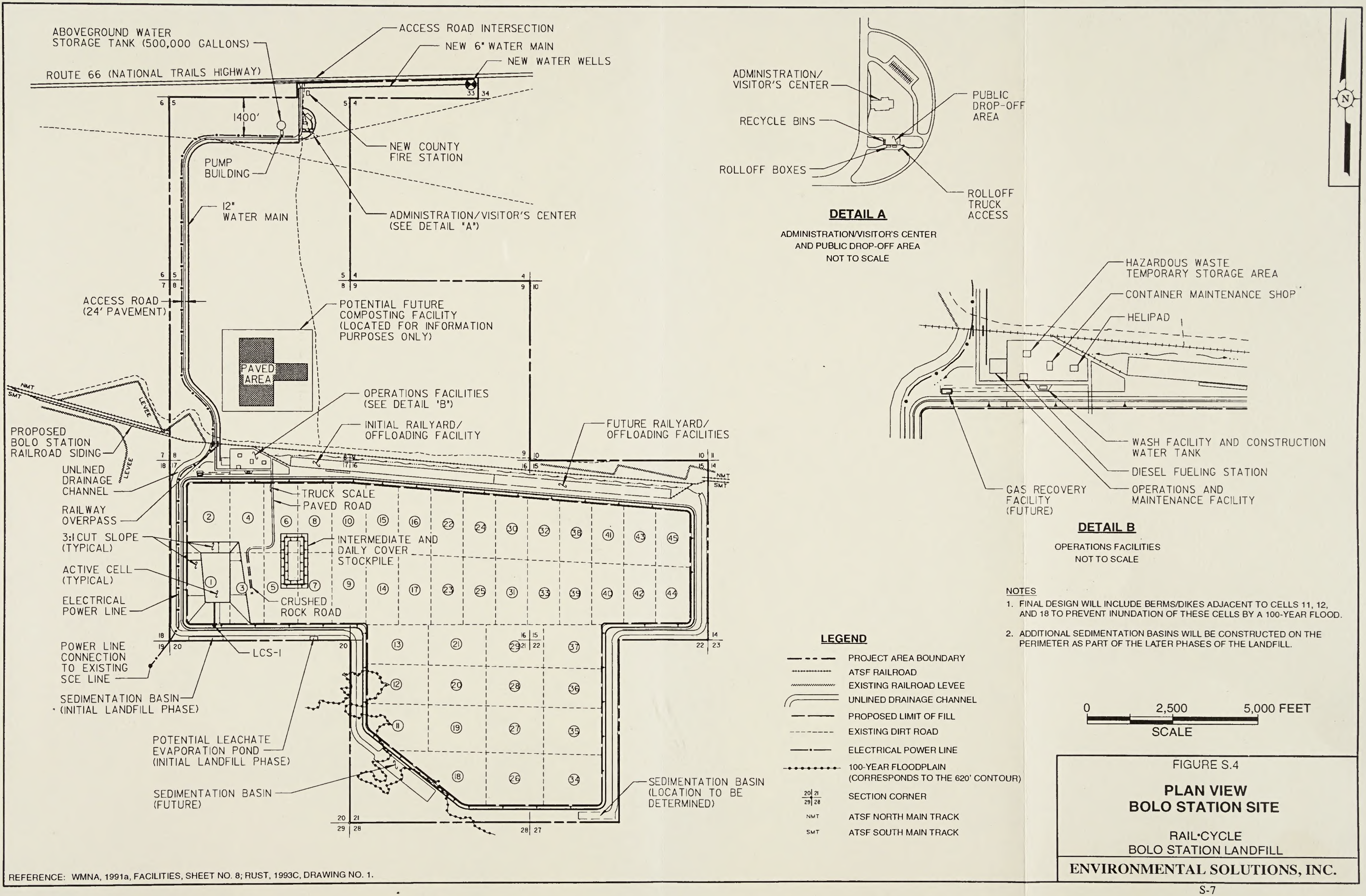
S.5 SUMMARY OF POTENTIAL ENVIRONMENTAL CONSEQUENCES

1. Potential environmental effects of the proposed action and alternatives were evaluated according to criteria for significance based on Appendix G of the CEQA Guidelines and/or other appropriate criteria established as part of this EIR/EIS. Mitigation measures to reduce or eliminate the impacts were also identified.

2. The potential impacts of the proposed action and alternatives are summarized and compared in Table S.1. Table S.2 lists the mitigation measures included in the Draft EIR/EIS, and the mitigation measures added or refined by the Supplement and this Final EIR/EIS. Tables S.1 and S.2 of this Final EIR/EIS supersedes Tables 1.1 and 1.2 of the Draft EIR/EIS.

3. Based on the impacts identified and mitigation measures incorporated in the EIR/EIS, the potential environmental effects of the proposed action would be reduced below a level of significance with the exception of:

   - Ground water supply related to incremental increase in the amount of water for onsite use withdrawn from an aquifer in overdraft.
   - Air quality impacts related to continued exceedance of the states ambient air quality standard for particulate matter less than 10 microns in aerodynamic diameter (PM_{10}), and oxides of nitrogen (NO_x), and reactive organic gases (ROG) emissions in the Southeast Desert Air Basin (SEDAB), a federal and state nonattainment area for PM_{10} and ozone.
   - Visual quality as a result of permanent alteration of the natural topography, and in the development of a long-term industrial-type activity in the project area, which changes the low intensive use of the site.
   - Modification of the existing rural "low intensive" to an "intensive industrial-type" use. The proposed action would also impact the open space value of the site associated with scenic resources.
   - Socioeconomic character of the region as increased employment opportunities would draw population to the region. This would establish or reinforce the concentration of population in the region and accelerate consumption of local land and water resources.


ABOVEGROUND WATER STORAGE TANK (500,000 GALLONS)
ACCESS ROAD INTERSECTION
NEW 6" WATER MAIN
NEW WATER WELLS
ROUTE 66 (NATIONAL TRAILS HIGHWAY)
1400'
PUMP BUILDING
NEW COUNTY FIRE STATION
12" WATER MAIN
ADMINISTRATION/VISITOR'S CENTER (SEE DETAIL "A")
ACCESS ROAD (24' PAVEMENT)
POTENTIAL FUTURE COMPOSTING FACILITY (LOCATED FOR INFORMATION PURPOSES ONLY)
PAVED AREA
OPERATIONS FACILITIES (SEE DETAIL "B")
INITIAL RAILYARD/ OFFLOADING FACILITY
FUTURE RAILYARD/ OFFLOADING FACILITIES
NMT
SMT
LEVEE
PROPOSED BOLO STATION RAILROAD SIDING
UNLINED DRAINAGE CHANNEL
RAILWAY OVERPASS
3:1 CUT SLOPE (TYPICAL)
ACTIVE CELL (TYPICAL)
ELECTRICAL POWER LINE
TRUCK SCALE
PAVED ROAD
INTERMEDIATE AND DAILY COVER STOCKPILE
CRUSHED ROCK ROAD
LCS-1
POWER LINE CONNECTION TO EXISTING SCE LINE
SEDIMENTATION BASIN (INITIAL LANDFILL PHASE)
POTENTIAL LEACHATE EVAPORATION POND (INITIAL LANDFILL PHASE)
SEDIMENTATION BASIN (FUTURE)
SEDIMENTATION BASIN (LOCATION TO BE DETERMINED)
② ④ ⑥ ⑧ ⑩ ⑮ ⑯ ㉒ ㉔ ㉚ ㉜ ㊳ ㊶ ㊸ ㊺
① ③ ⑤ ⑦ ⑨ ⑭ ⑰ ㉓ ㉕ ㉛ ㉝ ㊴ ㊵ ㊷ ㊹
⑬ ㉑ ㉙ ㊲
⑫ ⑳ ㉘ ㊱
⑪ ⑲ ㉗ ㉟
⑱ ㉖ ㉞
6 5 5 4 33 34 7 8 8 9 9 10 10 11 18 17 17 16 16 15 15 14 19 20 20 21 22 23 29 28 28 27
N
ADMINISTRATION/ VISITOR'S CENTER
RECYCLE BINS
ROLLOFF BOXES
PUBLIC DROP-OFF AREA
ROLLOFF TRUCK ACCESS
HAZARDOUS WASTE TEMPORARY STORAGE AREA
CONTAINER MAINTENANCE SHOP
HELIPAD
WASH FACILITY AND CONSTRUCTION WATER TANK
DIESEL FUELING STATION
OPERATIONS AND MAINTENANCE FACILITY
GAS RECOVERY FACILITY (FUTURE)
0
2,500
5,000 FEET
SCALE

DETAIL A

ADMINISTRATION/VISITOR'S CENTER
AND PUBLIC DROP-OFF AREA
NOT TO SCALE

DETAIL B

OPERATIONS FACILITIES
NOT TO SCALE

NOTES

1. FINAL DESIGN WILL INCLUDE BERMS/DIKES ADJACENT TO CELLS 11, 12, AND 18 TO PREVENT INUNDATION OF THESE CELLS BY A 100-YEAR FLOOD.
2. ADDITIONAL SEDIMENTATION BASINS WILL BE CONSTRUCTED ON THE PERIMETER AS PART OF THE LATER PHASES OF THE LANDFILL.

LEGEND

— - — -	PROJECT AREA BOUNDARY
┼┼┼┼	ATSF RAILROAD
≈≈≈	EXISTING RAILROAD LEVEE
═══	UNLINED DRAINAGE CHANNEL
———	PROPOSED LIMIT OF FILL
- - - -	EXISTING DIRT ROAD
—·—	ELECTRICAL POWER LINE
·-·-·-·	100-YEAR FLOODPLAIN (CORRESPONDS TO THE 620' CONTOUR)
20 21 / 29 28	SECTION CORNER
NMT	ATSF NORTH MAIN TRACK
SMT	ATSF SOUTH MAIN TRACK

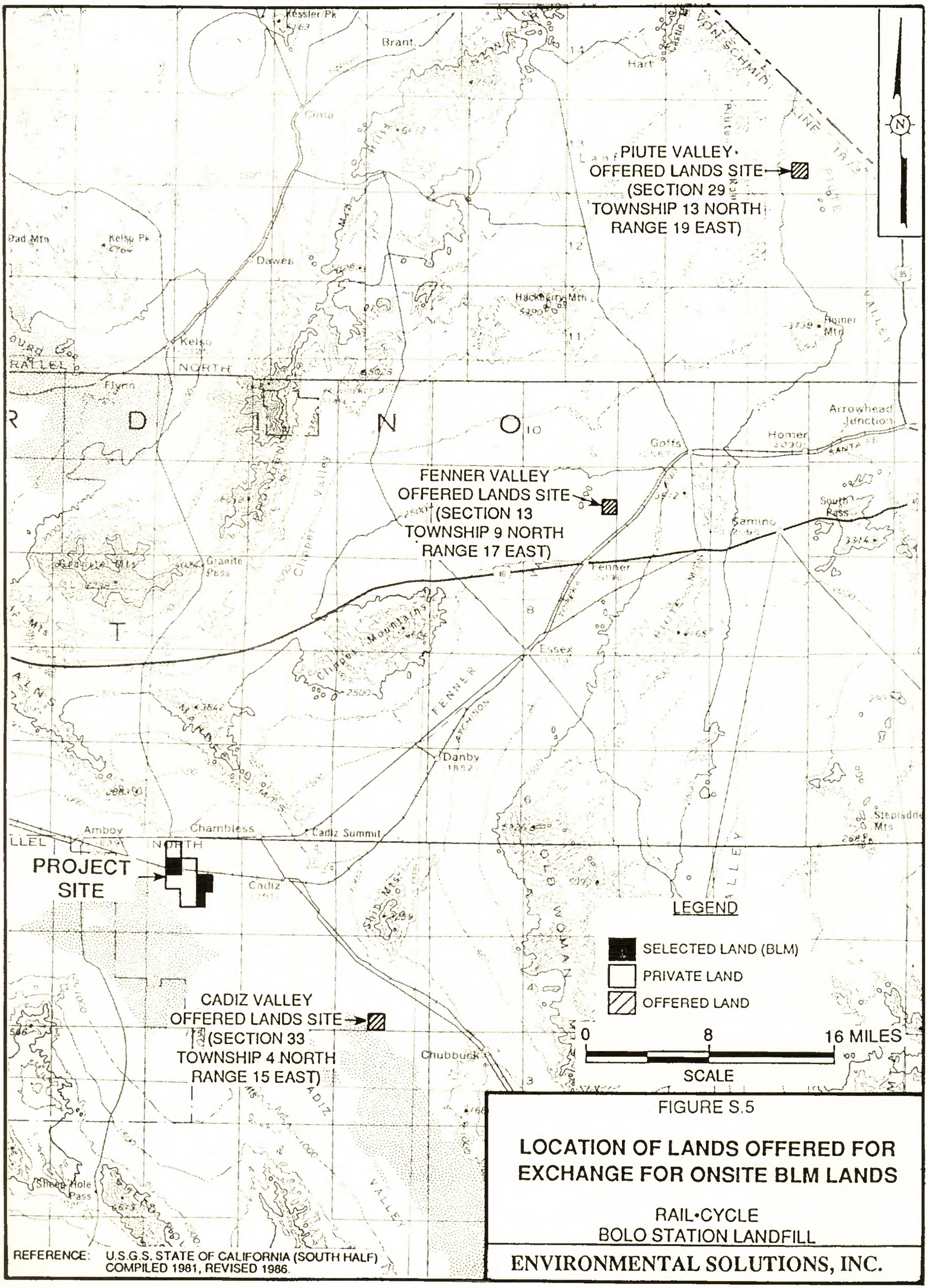
REFERENCE: WMNA, 1991a, FACILITIES, SHEET NO. 8; RUST, 1993C, DRAWING NO. 1.

FIGURE S.4

PLAN VIEW
BOLO STATION SITE

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.



REFERENCE: U.S.G.S. STATE OF CALIFORNIA (SOUTH HALF) COMPILED 1981, REVISED 1986.

FIGURE S.5

LOCATION OF LANDS OFFERED FOR EXCHANGE FOR ONSITE BLM LANDS

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

S - 4

4. For purposes of CEQA, a statement of overriding considerations is required for any unavoidable adverse impact that cannot be reduced to below a level of significance. While NEPA does not have a similar requirement, the information regarding unavoidable adverse impacts will be useful to the decision makers during preparation of the ROD for the EIS.

S.6 ALTERNATIVES TO THE PROPOSED ACTION

1. CEQA requires that an EIR, "describe a range of reasonable alternatives to the project or to the location of the project, which could feasibly attain the basic objectives of the project..." and that the discussion, "focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance" (Section 15126[d] of the CEQA Guidelines).

2. NEPA guidelines regarding alternatives are similar. An EIS must, "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated" (40 CFR, Chapter V, 1502.14[a]).

3. The alternatives selection process utilized for this EIR/EIS was described in Chapter 3.0 of the Draft EIR/EIS and was refined in Chapter 3.0 of the Supplement. The alternative analysis for the proposed action fulfills CEQA and NEPA criteria.

S.6.1 SELECTION OF ALTERNATIVES

1. CEQA and NEPA require that an EIR/EIS evaluate the relative effects of the No Action Alternative. However, beyond the requirement for the No Action Alternative, regulations do not provide specific guidance on the type of alternatives that must be evaluated.

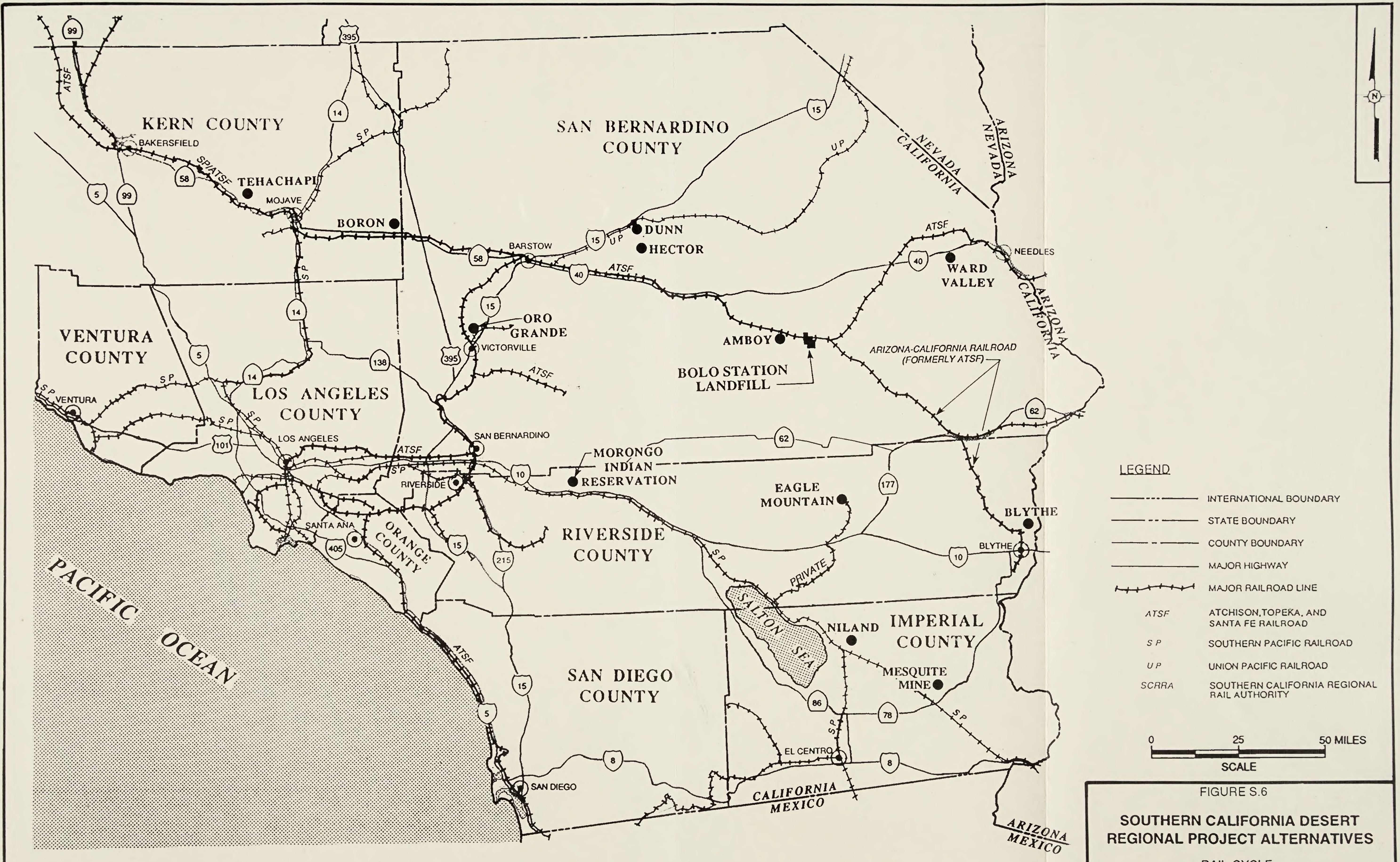
2. The Bolo Station Landfill has been proposed by Rail•Cycle as part of a waste-by-rail system to provide a waste disposal alternative for southern California. The potential need for and feasibility of a waste-by-rail system was evaluated by the Southern California Association of Governments to meet the waste disposal requirements of the San Gabriel Valley (SCAG, 1989). The Bolo Station site in San Bernardino County is the location being proposed by Rail•Cycle to meet the need identified by SCAG.

3. To identify sites that might be feasible alternatives to the proposed Bolo Station site from within the vast area of southern California desert, this EIR/EIS utilized a three-tiered approach for site selection. First, project-specific siting and operational criteria for a rail-haul regional landfill recommended by Rail•Cycle were reviewed by the County and BLM. These criteria were based on specific siting and operational requirements for Rail•Cycle and included the following:
    - The site must be located in a rural area.
    - The site must be located within an arid climate.
    - The site's development as a landfill must be compatible with surrounding, existing and planned land uses.
    - The site must be of a sufficient area and configuration to provide a minimum of 50 years of solid waste disposal capacity, with an appropriate buffer zone, based on an initial startup volume of 3,000 tons per day and increasing to 21,000 tons per day.
    - The site must be no more than approximately 230 rails miles, or require no more than a 24-hour turnaround time, from the majority of Los Angeles County.
    - The site must be located along a main rail line.
    - The site must have direct access of a major highway.

4. Based on the criteria above, the initial site selection focused on narrow corridors of land along rail lines in the rural desert areas of Kern, Riverside, San Bernardino, and Imperial counties. Guidance for selecting sites from among these corridors was obtained from the 1989 study by SCAG for a waste-by-rail system to meet waste disposal requirements of San Gabriel Valley (SCAG, 1989). As shown in Figure S.6, 12 potential sites for a rail-haul landfill were identified through this process.

5. Through the initial alternative site screening process, it was determined that only the Amboy and Boron sites met the basic siting and

91-109 FEIR/EIS REV. 6/28/94



REFERENCE: U.S.G.S. BASE MAP OF CALIFORNIA, SOUTHERN ONE-HALF. DATED 1968 AND REVISED IN 1981.

SCAG, 1988.

FIGURE S.6

SOUTHERN CALIFORNIA DESERT REGIONAL PROJECT ALTERNATIVES

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

operational criteria. The Boron site was eliminated form further consideration as it may provide suitable habitat for the threatened desert tortoise. This left only the Amboy site.

6. The Amboy site identified in the SCAG report is the approximate location of the proposed Bolo Station Landfill. To determine if there were other suitable sites for the rail-haul landfill in this region of the Mojave Desert, a second tiered site selection process was conducted to identify potential areas within the general area of Amboy. As a result of this process three locales within the San Bernardino County desert region were identified and four potential alternative sites in the Amboy/Cadiz area were identified for evaluation.

7. The three locales shown in Figure S.7 represent areas along the ATSF rail line between Barstow and Amboy which meet the basic siting criteria and are not limited by one or more of the following factors:
   - Proximity to the populated areas from Barstow to Newberry Springs.
   - Topographical or geologic features such as steep slopes and lava flows.
   - Steep grades on the ATSF rail line.
   - High ground water or dry lake beds.
   - Jurisdictional boundaries (e.g., Twentynine Palms Marine Crops Base).

8. The third-tier of the alternative site evaluation focused on the three alternative locales and four alternative sites in the Amboy/Cadiz area. The seven sites were evaluated according to the following siting and design criteria associated with federal, state and local regulatory requirements:
   - Land use compatibility including conflicts with lands designated for protection under the proposed California Desert Protection Act.
   - Biological resources, including impacts to sensitive plant and wildlife species.
   - Water resources, including surface and ground water.
   - Geologic resources, including seismic and topographic characteristics.

9. Based on the alternative site selection process, the EIR/EIS analyzed the three following alternatives:
   - **No Action Alternative** - Under this alternative the proposed Bolo Station Landfill would not be developed. There would be no site-specific impacts and no additional project-related rail traffic impacts. The site would remain in its present condition and would be available for future development, as permitted by BLM policy and County land use designations.
   - **Reduced Action Alternative** - This alternative would reduce the maximum daily waste volume transported to the site from 21,000 tons per day to 12,000 tons per day, and limit the landfill life to 40 years as compared to 60 to 100 years for the proposed action. It would also reduce the landfill and support area footprint, and would require the exchange of only one section of federal lands (i.e., Section 15) as compared to the proposed action that requires the exchange of two and one-half sections of federal lands.
   - **Cadiz Valley Alternative** - This alternative would result in the proposed action occurring at another site in the Amboy/Cadiz area. Landfill operations would be similar to those described for the proposed action. This alternative site is located approximately ten miles southeast of the proposed Bolo Station site. The alternative site consists of five sections of land as compared to the seven and one-half sections of federal lands (i.e., Section 18) and one section of state land (i.e., Section 17).

10. A comparison of the environmental impacts associated with the proposed action, and the Reduced Action Alternative and Cadiz Valley Alternative is provided in Table S.2 of this Final EIR/EIS.

S.7 INTENDED USES OF THIS EIR/EIS

1. This EIR/EIS is intended to provide the public, lead agencies, responsible and reviewing agencies, and decision-makers with a comprehensive analysis of the proposed action with regard to: (1) environmental consequences; (2) mitigation measures to avoid or reduce impacts; and (3) feasible alternatives. The level of technical detail, evaluation and analysis included in this EIR/EIS is consistent with CEQA and NEPA, and

is sufficient to provide an understanding of the potential environmental impacts associated with the proposed action.

2. This EIR/EIS is the initial phase of the process for issuance of various permits or approvals by agencies and governing boards for the proposed action. The second phase, portions of which may occur concurrently with this EIR/EIS, is the preparation and submission of appropriate application packages for specific permits or approvals. These applications will include technical reports, studies, and engineering data, as necessary, to describe in detail landfilling operations to the satisfaction of permitting and/or reviewing agencies. The third and final phase is public and agency review of permit applications, development of specific permit conditions, and issuance of permits by the agencies. This phase may result in modifications to the proposed action to meet various regulatory requirements or permit conditions.

3. This EIR/EIS will be used by the County for its discretionary actions regarding the proposed action including its consideration of amending the County General Plan, and issuances of a CUP and Solid Waste Facilities Permit. The BLM will use this EIR/EIS during its consideration of amending the CDCA, the exchange of two and one-half sections of federal land for these sections of private land, and the issuance of two easements for right-of-way.

4. The proposed action would also require permits or approvals from regional or state agencies, acting as responsible agencies, as defined by CEQA. These agencies include the California Regional Water Quality Control Board (RWQCB), the California Integrated Waste Management Board (CIWMB), and the Mojave Desert Air Quality Management District (MDAQMD).

S.8 FINAL EIR/EIS REQUIREMENTS

1. This Final EIR/EIS is a continuation of the environmental process that began with the preparation of an Initial Study by the County (County, 1991). Based on the findings of the Initial Study, the County and BLM determined that potential significant environmental consequences were associated with the proposed action. As the respective lead agencies for CEQA and NEPA, and in accordance with state and federal guidelines, the County and BLM decided to prepare a joint EIR/EIS. Based on this decision, the County distributed a Notice of Preparation of an EIR, and the BLM published and distributed a Notice of Intent to prepare an EIS.

2. CEQA Guidelines (California Code of Regulations [CCR], Title 14, §15132) require that the Final EIR consist of:

   - The Draft EIR or a revision of the draft.
   - Comments and recommendations received on the Draft EIR either verbatim or in summary.
   - A list of persons, organizations, and public agencies commenting on the Draft EIR.
   - The responses of the lead agency to significant environmental points raised in the review and consultation process.
   - Other information added by the lead agency.

3. Federal regulations require that the Final EIS include the draft document, plus responses to comments (40 Code of Federal Regulations [CFR] 1503.4). The response to comments may take the form of a revision to the Draft EIS or may be a separate section in the Final EIS.

4. This Final EIR/EIS for the Bolo Station Landfill has been prepared in an abbreviated format in accordance with Council on Environmental Quality (CEQ) Regulations (40 CFR 1503.4(c)). This document should be used in conjunction with, rather than in place of, the Draft EIR/EIS and Supplement. Therefore, this information, together with the Draft EIR/EIS and Supplement, fulfills CEQA and NEPA requirements for a Final EIR/EIS.

5. The County Planning Commission will hold a public hearing on the proposed action and consider this Final EIR/EIS along with the Draft EIR/EIS and Supplement, and provide a recommendation to the County Board of Supervisors. The County Board of Supervisors will hold a public hearing regarding the project, make its decision regarding the proposed action and certification of the EIR/EIS.

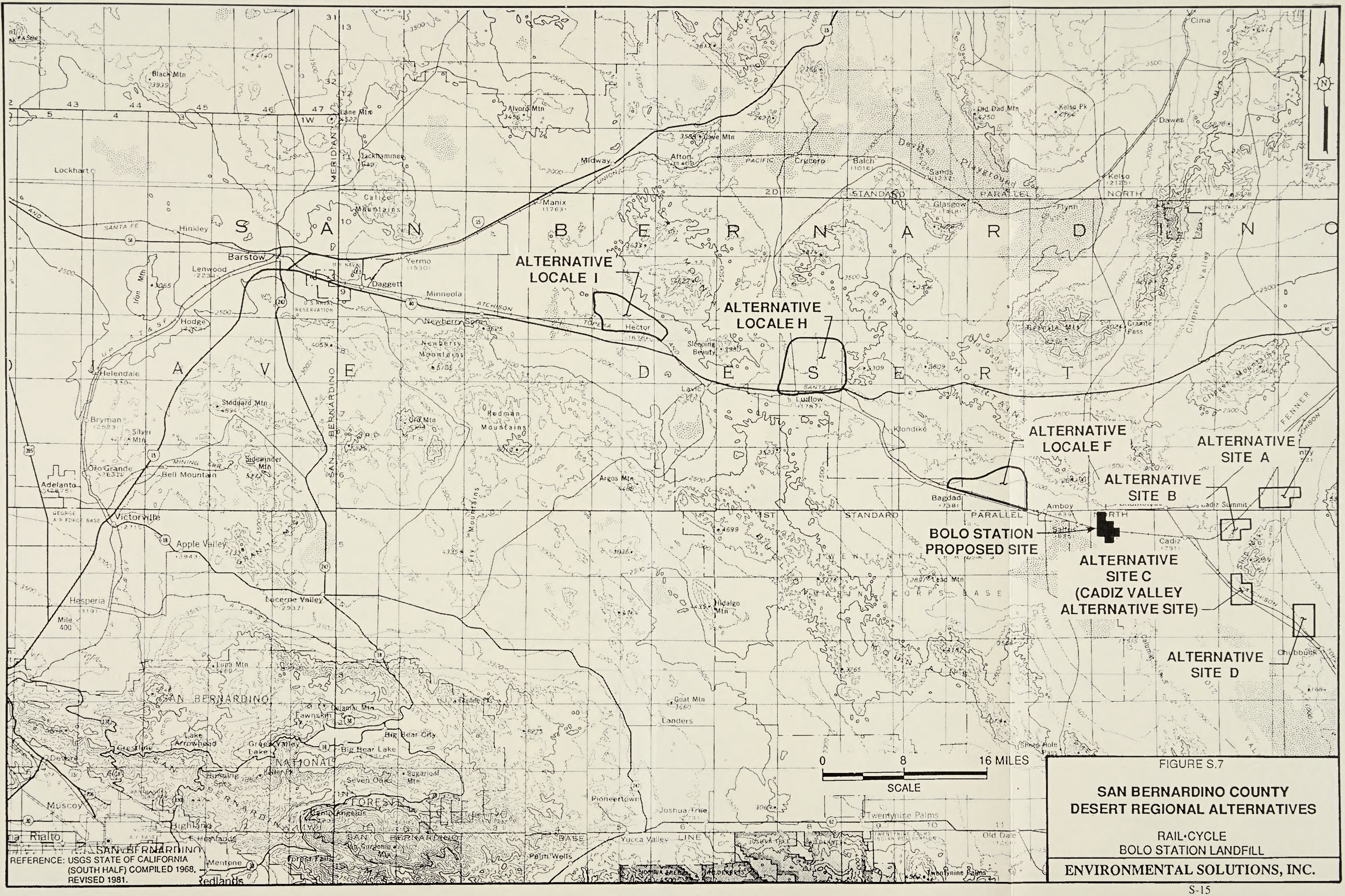


FIGURE S.7

SAN BERNARDINO COUNTY
DESERT REGIONAL ALTERNATIVES

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

REFERENCE: USGS STATE OF CALIFORNIA (SOUTH HALF) COMPILED 1968, REVISED 1981.

S.8.1 CONTENTS OF THIS EIR/EIS

1. The contents of this EIR/EIS are briefly summarized as follows:

   - **Draft EIR/EIS**: The Draft EIR/EIS included a comprehensive analysis of the potential environmental consequences of the proposed Rail•Cycle-Bolo Station Landfill. This document provided a detailed description of the proposed action and analyses of potential environmental effects. The existing environment was described and environmental issues of concern that were identified as a result of a BLM and County public scoping process, and the County Initial Study were analyzed. Mitigation measures developed for each identified adverse effect were specified. Alternatives to the proposed action were evaluated for feasibility and environmental effect. Potential cumulative effects of the proposed action, combined with other existing or future activities in the area, were evaluated.

     In November 1992, the Draft EIR/EIS was distributed to agencies, organizations and individuals for a 90-day review and comment period. During this period, BLM held three public hearings to obtain verbal comments on the Draft EIR/EIS. The public hearings were held in February 1993 in the cities of Barstow, Twentynine Palms, and San Bernardino, California. In addition to verbal comments received during the public hearings, the County and BLM received approximately 90 letters from agencies, organizations, and individuals providing comments on the Draft EIR/EIS. Transcripts from the public hearings, public and agency comments letters, and responses to these comments are included in Chapter 2.0 of this Final EIR/EIS.

   - **Supplement**: To respond to various issues regarding potential environmental effects of the proposed action that were not fully addressed in the Draft EIR/EIS, the County and BLM decided that a Supplement to the Draft EIR/EIS would be prepared. The areas for which the Supplement provided revised or clarified information included: (1) purpose and need for the proposed action; (2) changes to the description of the proposed action; and (3) environmental issues such as geology and soils, surface hydrology and ground water, mineral resources, air quality, and noise.

     The Supplement was circulated in December 1993 for a 60-day public review and comment period. The County and BLM received approximately 40 letters from agencies, organizations, and individuals providing comments on the Supplement. The public and agency comment letters and responses to these comments are included in Chapter 3.0 of this document. An overview of issues raised in the comments on the Draft EIR/EIS and Supplement is included in Table S.3.

   - **Final EIR/EIS**: This document includes the public and agency comments submitted on the Draft EIR/EIS and Supplement. Specific responses to public comments on the Draft EIR/EIS (see Chapter 2.0) and the Supplement (see Chapter 3.0) are included in this Final EIR/EIS. This Final EIR/EIS describes how the environmental documentation will be used in the decision-making process and provides a record of the public review process for this project.

     This Final EIR/EIS has been filed by the County and BLM with the California State Clearinghouse and by the BLM with the U.S. Environmental Protection Agency (EPA). Copies of this Final EIR/EIS have been provided to the public and agencies.

2. A Mitigation Monitoring and Compliance Program has been prepared for the proposed action in accordance with Section 21081.6 of CEQA.

3. For a complete understanding of the proposed action, its potential effects, mitigation measures and alternatives, the reader is encouraged to review each of the above documents in their entirety. The following sections are provided as an overview of the proposed action, the environmental review process and the major conclusions of the environmental impact analysis.

S.8.2 EIR/EIS PROCESS

1. The following briefly summarizes the EIR/EIS process as it relates to the proposed action:

   - **Notice of Preparation and Notice of Intent** - Public notification to prepare an EIR/EIS. The Notice of Preparation was distributed by the County to state agencies, local organizations, and individuals. The Notice of Intent prepared by BLM was published in the Federal Register.

- **Public Scoping Meetings** - Public scoping meetings were held by BLM in Barstow, Twentynine Palms, and San Bernardino to solicit input from individuals, groups and agencies of issues which should be addressed in the EIR/EIS.
- **Preparation of the Draft EIR/EIS** - The Draft EIR/EIS was prepared to identify, describe, and analyze the environmental issues of the proposed action and alternatives.
- **Notice of Completion and Federal Register Publication** - The availability of the completed Draft EIR/EIS was announced by the County with a Notice of Completion and by BLM through the EPA in the Federal Register.
- **Public Distribution of the Draft EIR/EIS for Review and Comment** - The Draft EIR/EIS was distributed in November 1992 for a 90-day review and comment period to the public, including interested individuals, groups, government representatives, and agencies.
- **Public Hearings** - Three public hearings were held by the BLM during the 90-day Draft EIR/EIS review period, to provide the public with an opportunity to verbally comment on this document. The public hearings were held in Barstow, Twentynine Palms, and San Bernardino, California.
- **Preparation and Distribution of Supplement** - The County and BLM decided that a Supplement to the Draft EIR/EIS should be prepared. The Supplement was circulated in December 1993 for a 60-day review and comment period.
- **Preparation of this Final EIR/EIS** - This Final EIR/EIS has been prepared to respond to public comments on the Draft EIR/EIS and Supplement.
- **Public Distribution of the Final EIR/EIS** - This Final EIR/EIS is being distributed by the BLM for a 30-day public notification period and by the County for a 10-day public notification period.
- **Notice of Determination** - The County Board of Supervisors will hold a public hearing to certify the adequacy of this Final EIR/EIS, make its decision regarding the proposed action, and prepare and file a Notice of Determination with the State Clearinghouse.
- **Record of Decision (ROD)** - The BLM can issue its ROD regarding the proposed action after the end of the notification period for the EIS.

S.9 FINAL EIR/EIS FORMAT

1. The remainder of the Final EIR/EIS is organized under the following primary chapter headings:
    - **1.0 - Changes/Corrections to the Draft EIR/EIS and Supplement** - This chapter includes minor changes/corrections to the Draft EIR/EIS and Supplement.
    - **2.0 - Specific Responses to Comments on the Draft EIR/EIS** - This chapter includes responses to public comments on the Draft EIR/EIS.
    - **3.0 - Specific Responses to Comments on the Supplement** - This chapter includes responses to public comments on the Supplement.
    - **4.0 - Terms and Abbreviations** - Terms are described as they are used in this document, and a list of abbreviations is provided.
    - **5.0 - List and Qualifications of Preparers** - This chapter identifies individuals who contributed to preparation of the Final EIR/EIS.
    - **6.0 - Organizations and Persons Consulted** - This chapter provides a list of individuals and organizations that have contributed data used or concerns to be addressed in the Final EIR/EIS.
    - **7.0 - Final EIR/EIS Distribution List**
    - **8.0 - References and Resources**
    - **Appendix A**: Process for Protesting an Amendment to the CDCA Plan.

- **Appendix B**: Air Quality Calculations for Federal Right-of-Way Easements.
- **Appendix C**: California Department of Fish and Game Letter: Section 1600 Streambed Alteration Agreement Requirements.
- **Appendix D**: San Bernardino County Geologist Memorandum: Concurrence with Geologic Review.
- **Appendix E:** Geologic and Seismic References and Overview Table.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES

Page 1 of 9

ENVIRONMENTAL ISSUE	IMPACTS(1)(2)		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
GEOLOGY AND SOILS			
• Seismic Hazard	• The maximum probable earthquake at the site may result in accelerations up to 0.09g due to movement on the active Ludlow Fault. The maximum credible earthquake on the Ludlow Fault may result in accelerations up to 0.20 g at the site. No known faults trend through or toward the site.	• The maximum probable earthquake at the site may result in accelerations up to 0.05g due to movement on the Ludlow Fault. No known or mapped faults or lineaments trend through or towards the site. Potential for seismic settlement, differential compaction, or liquefaction is very low. Some rock fall may occur from steep slopes.	• Same as proposed action.
• Subsidence	• Total ground settlement ranging from 4.8 to 15.6 feet may occur in underlying soils.	• Unknown, no subsurface studies conducted. Expected to be less than Bolo Station site due to placement of site on coarse, dense, cohesionless soil where depth to ground water is greater than 50 feet.	• Similar, but less than the proposed action, as less waste loading will be applied.
• Differential Settlement	• Settlement in the form of tilting of the landfill bottom may result from different amounts of vertical settlement across a large horizontal distance. The slope of the tilting is expected to be in the range of less than 0.01 (vertical:horizontal). A slope of 0.01 is equivalent to 0.1 foot of settlement over a 10-foot distance. The occurrence of a significant amount of abrupt differential settlement is considered remote.	• Unknown, no subsurface studies conducted.	• Same as proposed action.
	• Landfill settlement within the waste prism is anticipated to occur at a rate of 10 percent by height and 6 percent by volume, and could result in disruption of the landfill gas collection system and integrity of the final cover.	• Same as proposed action.	• Same as proposed action.
• Volcanic Hazard	• Site is located seven miles west of Amboy Crater, an area of potential volcanic activity that could impact the proposed site.	• Site is located ten miles from Amboy Crater. Potential hazard would be less than for the Bolo Station site.	• Same as proposed action.

(1) The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.

(2) Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES

(Continued)

Page 2 of 9

ENVIRONMENTAL ISSUE	IMPACTS[(1)(2)]		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
MINERAL RESOURCES			
• Brines	• In the event ground water contamination occurred, it could impact brines pumped from three water production wells operated by the Cargill Salt Company near the site. • Dust and other airborne contaminants generated by the project may contribute to impurities in the salt evaporation tanks.	• In the event ground water contamination occurred, it is unlikely that the brines would be impacted, as the distance and ground water gradient provide adequate time to implement a corrective action program. • Similar impacts from dust and airborne contaminants may occur to salt evaporators on Cadiz Lake.	• Same as proposed action.
• Other Potential Minerals	• No rare, unique, or regionally significant or commercial mineral resources exist onsite.	• Portions of Sections 5, 8, and 17 are included in an area considered to have potential uranium and/or thorium deposits. However, no field studies have been done to verify that economic deposits exist.	• Similar to proposed action, although slightly reduced due to smaller landfill footprint.
HYDROLOGY			
• Drainage	• Existing surface drainage patterns result in surface flow across the site. If the surface flow is not controlled and diverted, landfill facilities and operations would be impacted. • Alteration of the existing drainage patterns onsite and downgradient of the site will occur. This will result in concentration and channelization of the surface flows, and increased erosion in the flow pathway.	• Similar to proposed action. • Similar to proposed action.	• Same as proposed action. • Same as proposed action.

---

(1) The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.

(2) Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES
(Continued)

ENVIRONMENTAL ISSUE	IMPACTS(1)(2)		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
HYDROLOGY (Continued)			
• Surface Water Contamination	• Surface water contamination may occur from discharge of stormwater which has become contaminated onsite.	• Similar to proposed action.	• Same as proposed action.
• 100-Year Floodplain	• No impact; landfill has been reconfigured to remove it from the 100-year floodplain.	• No impact; not located in the 100-year floodplain.	• Same as proposed action.
• Ground Water Supply	• Approximately 130 acre-feet of water will be extracted from an aquifer which may already be in overdraft.	• No impact, aquifer is not expected to be in overdraft.	• Same as proposed action.
• Ground Water Impairment	• Ground water impairment may result from a leak in the liner (leachate) or landfill gas migration through the liner.	• Similar to proposed action.	• Same as proposed action.
VEGETATION	• Approximately 2,780 acres of vegetation will be disturbed.	• Similar to proposed action.	• Similar to proposed action, but would reduce acreage disturbed to 2,380 acres.
WILDLIFE	• Although desert tortoise do not inhabit the site or adjacent lands, the landfill may attract ravens, which prey on desert tortoises in the region. • Kit fox, a species of concern to state biologists, may be impacted. The impact to this species would not be significant. • Project will result in the disturbance of approximately 2,780 acres of native habitat, causing wildlife to relocate. • Noise, light, and increased traffic are not expected to impact wildlife. • Potential illegal collection of desert tortoise by landfill employees or visitors.	• The protected desert tortoise species has been identified onsite. Approximately 80 tortoises may be affected by implementation of the project. • Kit fox dens are also known for the site. The impact to this species would not be significant. • Bighorn sheep in the Ship Mountains may be impacted by operation of a landfill at the alternative site.	• Similar to proposed action, but acreage of disturbed vegetation decreased to 2,380 acres. • Similar to proposed action, but acreage of disturbed vegetation decreased to 2,380 acres.

---

(1) The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.
(2) Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES

(Continued)

Page 4 of 9

ENVIRONMENTAL ISSUE	IMPACTS[(1)(2)]		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
WILDLIFE (Continued)	• The BLM consulted with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the Endangered Species Act regarding the proposed action's potential effect on the desert tortoise. The USFWS rendered a "no jeopardy" Biological Opinion which completes the Section 7 consultation for the proposed action.	• Project will result in the loss or disturbance of approximately 2,700 acres of native habitat, causing wildlife to relocate.	• Same as proposed action.
AIR QUALITY	• PM_{10} emissions would contribute to 24-hour and annual standard exceedances, as the SEDAB is nonattainment for PM_{10}. • The project would emit NO_x and ROG, which are precursors to ozone (O_3) and therefore contribute to the existing O_3 exceedances in SEDAB. SEDAB is nonattainment for O_3.	• Similar to proposed action. • Similar to proposed action.	• Same as proposed action.
PUBLIC HEALTH AND SAFETY • Fire	• In the event a surface fire occurred (which is considered very unlikely) the following impacts could result: - Burn injuries and smoke exposure. - Loss of life. - Release of toxic emissions. - Structural and machinery damage.	• Same as proposed action.	• Same as proposed action.

---

(1) The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.

(2) Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES
(Continued)

Page 5 of 9

ENVIRONMENTAL ISSUE	IMPACTS[1][2]		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
PUBLIC HEALTH AND SAFETY (Continued)			
• Fire (Continued)	• In the event a subsurface fire occurred (which is considered very unlikely), the following impacts could result: - Accelerated or sudden settling of the landfill surface in the vicinity of the fire. - Venting of smoke through the cover material, which may emit various volatile and toxic compounds.	• Same as proposed action.	• Same as proposed action.
• Hazardous Waste	• Small quantities of hazardous waste may be deposited in the landfill. • The handling, storage, and use of diesel fuels, lubricating oils, hydraulic fluids, and waste oils for recycling present a potential hazard.	• Same as proposed action.	• Same as proposed action.
• Nuisance Vectors, Litter and Odors	• No significant impacts due to nuisance vectors, litter, and/or odors are expected from the proposed action.	• Same as proposed action.	• Same as proposed action.
VISUAL RESOURCES	• During the 60- to 100-year operational life of the landfill, the visual qualities of the site will be impacted. • The presence of the landfill and associated facilities and operations would substantially change the visual character of the site.	• Similar to proposed action. Viewshed from the Cadiz Dunes would also be degraded. • Similar to proposed action.	• Same as proposed action, but of reduced areal extent and operating life. • Same as proposed action, but of reduced areal extent and operating life.

---

(1) The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.
(2) Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES
(Continued)

ENVIRONMENTAL ISSUE	IMPACTS(1)(2)		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
VISUAL RESOURCES (Continued)	• The construction and operation of the landfill will contribute to degradation of the Bristol Basin viewshed by changing the character of the site from passive to active use, with notable vehicle/rail movement and dust emissions. This impact would be reduced when the landfill closes. • Illumination of the night sky from nighttime landfill operations.	• Similar to proposed action.	• Similar to proposed action.
CULTURAL RESOURCES	• One of the 22 onsite cultural resource sites has been determined to meet the criteria for eligibility to the National Register of Historic Places (NRHP). This site, SB-2910H, is a segment of the National Old Trails Road (1914-1943). This site will be affected by the proposed access road but a no adverse effect determination has been made based on "adaptive reuse" of the road. BLM consulted with the State Historic Preservative Officer (SHPO) and the SHPO agreed with the no adverse effect determination. SHPO's concurrence completes the Section 106 of the NHPA process.	• Unknown - The siting and operation of a landfill and associated facilities has the potential to adversely impact significant cultural resources.	• Same as proposed project.
PALEONTOLOGICAL RESOURCES	• Land-altering activities, both surface and subsurface, have the potential to disturb or destroy significant paleontological resources, if present. • Increased human presence, through establishment of a large onsite work force, could facilitate the recreational collection of significant fossils, which would destroy their scientific value.	• Impacts would be similar to the proposed action, based on archival data and a literature review. • Similar as proposed action.	• Impacts would be similar to the proposed action, but on a lesser scale. • Same as proposed action.

(1) The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.

(2) Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES
(Continued)

Page 7 of 9

ENVIRONMENTAL ISSUE	IMPACTS(1)(2)		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
PALEONTOLOGICAL RESOURCES (Continued)	• Improved access to the site vicinity, through establishment of the access road from Route 66, could facilitate the recreational activities by the public, including fossil collection, in the near vicinity of the site and elsewhere in the basin accessible by the network of dirt roads.	• Same as proposed action.	• Same as proposed action.
TRANSPORTATION			
• Highways	• Additional traffic on roads.	• Similar to the proposed action, but Cadiz Road would have to be surfaced in unpaved areas before project construction could begin.	• Similar to the proposed action, but with a smaller increase in traffic volumes.
• Railways	• At full capacity (21,000 tons per day of waste), 14 one-way train trips per day, six days a week would be added to existing rail traffic. This would result in a 24 percent increase in the hazard index over non-project related values. It would also result in an additional 554-vehicle hours of delay (37 percent increase) over delays without the project.	• Similar to proposed action.	• Similar to the proposed action but with smaller increases in the hazard index and delays. Only eight one-way trains would be utilized, rather than 14. The hazard index would increase 16 percent over nonproject-related values and a 28 percent increase in delay time would occur.
NOISE			
• Railroad Corridors	• Noise levels along railroad corridors will increase. Average increases in Community Noise Equivalent Level (CNEL) are at or below 3 decibel (dBA) significant threshold.	• Same as proposed action.	• Similar to proposed action, but slightly less.
• Landfill Operations	• Noise levels will increase due to landfill, offloading, and related operations. • Equipment operators onsite may experience excessive noise levels.	• Similar to proposed action. • Same as proposed action.	• Similar to proposed action, but slightly less. • Same as proposed action.

---

(1) The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.

(2) Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES
(Continued)

Page 8 of 9

ENVIRONMENTAL ISSUE	IMPACTS[1][2]		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
LAND USE			
• Change in Existing Land Use	• The proposed action would represent a modification of existing rural low intensive use of the site to an intensive industrial-type use.	• Same as proposed action.	• Same as proposed action.
• Compatibility with Existing and Future Land Uses	• No significant impact.	• Same as proposed action.	• Same as proposed action.
• Land Exchange	• No significant impact.	• No significant impact.	• No significant impact.
SOCIOECONOMICS			
• Employment	• Employment demand would increase. The project would employ up to 257 personnel for construction and 288 for operation of the landfill. An additional 167 indirect jobs would be associated with the proposed action.	• Similar to proposed action.	• Similar to proposed action, but at a lesser scale during operations due to reduced daily waste delivery and shortened life span of facility.
• Population	• Population in the project region (i.e., Barstow and Morongo Basin) is expected to increase by up to 668 people, due to direct employment opportunities, and an additional 250 people due to indirect employment.	• Same as proposed action.	• Similar to proposed action, but at a lesser scale during operations due to reduced employment or shortened life span of the facility.

---

[1] The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.

[2] Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.1

SUMMARY COMPARISON OF IMPACTS FOR THE PROPOSED ACTION AND ALTERNATIVES
(Continued)

ENVIRONMENTAL ISSUE	IMPACTS(1)(2)		
	Bolo Station Site	Cadiz Valley Alternative Site	Reduced Action Alternative
SOCIOECONOMICS (Continued)			
• Housing	• It is expected that approximately 76 housing units will be required in the Morongo Basin area, and 76 housing units will be required in the Barstow vicinity. The housing inventory in Barstow and the Morongo Basin are expected to be sufficient to meet project needs.	• Same as proposed action.	• Similar to proposed action, but at a lesser scale during operations due to reduced employment or shortened life span of the facility.
• Public Services			
- Schools	• An additional three to four classrooms and three to four more personnel would be required.	• Same as proposed action.	• Similar to proposed action.
- Health Services	• No health services are currently available in the immediate project area.	• Same as proposed action.	• Similar to proposed action
- Police and Firefighting	• Additional population would increase the demands on police and firefighting services of the area.	• Same as proposed action.	• Similar to proposed action
- Solid Waste Disposal	• Increased populations may require a more formalized disposal program than currently exists.	• Same as proposed action.	• Same as proposed action.
- Utilities	• Increased population in the Morongo Basin and Barstow area would place additional demands on municipal water systems that are at or near capacity, or on aquifers considered to be at or near overdraft.	• Same as proposed action.	• Same as proposed action.

91-109 (7/8/94/jtw)

---

(1) The No Action Alternative was not included in this table, as there will not be any impacts associated with this alternative.

(2) Mitigation measures for the identified impacts are listed in Table S.2.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Page 1 of 13

MITIGATION MEASURES(1)	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
GEOLOGY AND SOILS	
G-1 Structures onsite shall be engineered and constructed per the uniform building code to withstand the maximum probable acceleration with little or no damage. (Draft EIR/EIS)	• None.
G-2 The landfill shall be designed and constructed as required by CCR title 14 and title 23 to withstand the expected ground motions and potential effects of seismic stability, liquefaction, subsidence and differential settlement. (Draft EIR/EIS)	
G-3 A postearthquake inspection plan shall be developed. An inspection of the structures and landfill shall be conducted after a m5.0 or greater earthquake within 50 miles of the site. Damage incurred during a seismic event shall be mitigated as soon as practical after the event. (Draft EIR/EIS)	
G-4 Excavation prior to landfilling shall be based on the highest anticipated ground water elevations (i.e., Without pumping from nearby wells such as those operated by Cargill) and capillary rise, and shall be designed to offset the expected ground settlement while maintaining a minimum separation of 5 feet between waste and ground water. (Draft EIR/EIS)	
G-5 Landfill pipes and elements shall be designed to withstand or reduce forces applied by settling waste. Flexible or adjustable connections shall be used for piping at interfaces between cells and around the landfill perimeter. (Draft EIR/EIS)	
G-6 A monitoring plan shall be developed to evaluate whether the leachate and landfill gas collection systems are operating efficiently. (Draft EIR/EIS)	
G-7 Clay cover materials shall be specified and monitored to minimize settlement of landfill cover and to assure the integrity of the cover and surface drainage systems. (Draft EIR/EIS)	
G-8 Waste disposal shall not take place in a cell until a subsurface geologic investigation has confirmed that the cell is free of holocene faulting or other geologic hazards. The subsurface investigation may consist of geologic logging of cell walls during cell excavation or by other means approved by the RWQCB and county geologist. Should active faulting or geologic hazards be encountered, appropriate setbacks shall be provided and if necessary, the cell(s) shall be reconfigured within the approved limits of the landfill. (Final)	
MINERAL RESOURCES	
M-1 The composite liner system, leachate collection system, landfill gas collection system, and final cover are designed to prevent contamination to underlying ground water. The components of the landfill liner or their equivalent which shall be installed are: (Final) • Prepared sloped subgrade. • Vadose zone monitoring layer. • 60-mil HDPE (secondary liner) or equivalent flexible membrane liner (FML). • Geonet drainage layer and collection trench and pipe (secondary collection). • Geosynthetic clay liner (primary liner). • 60-mil HDPE (primary liner) or equivalent FML. • Geonet drainage layer collection trench and pipe (primary collection). • Nonwoven geotextile silt filter layer. • A 2-foot thick protective soil layer. • Selected waste (initial lift will be screened to remove objects that could damage liner).	• None.
M-2 Ground water and landfill gas monitoring systems have been designed to detect contamination in the event that ground water contamination occurs. If water protection standards included in the WDRs are not met, Rail•Cycle shall implement a corrective action program to remediate the affected ground water. (Draft EIR/EIS)	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

(Continued)

MITIGATION MEASURES(1)	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
MINERAL RESOURCES (Continued)	
M-3 A financial assurance program, funded by Rail•Cycle shall be established to pay entities involved, including the federal government, for increased purification costs or loss of a mineral resource. (Draft EIR/EIS)	
M-4 Dust and other airborne contaminants which could potentially impact salt evaporators shall be controlled by frequent watering of unpaved roads and working areas, and operation of a landfill gas collection system. (Draft EIR/EIS)	
HYDROLOGY	
H-1 Stormwater run-on and runoff control structures, including temporary and permanent diversion ditches, sedimentation and retention basins, shall be designed, constructed and maintained for the 100-year, 24-hour storm. (Supplement)	• Extraction of an additional annual average of 130 acre-feet of water will be a significant unavoidable adverse impact because the aquifer is considered to be in overdraft at this time.
H-2 An earthen drainage channel shall be constructed to intercept and divert the stormwater to the perimeter drainage channel system along the east and west boundaries of the proposed landfill. This channel shall collect water flowing south of the railbed, redirect it around the perimeter of the landfill, and discharge it from the south side of the site. This channel shall also intercept sheet flow runoff from the unloading area and railyard, and other nonlandfill areas adjacent to the channels. (Draft EIR/EIS)	
H-3 Sedimentation basins and energy dissipaters shall be installed at the discharging end of the drainage channels to reduce flow velocity and resulting erosion. (Draft EIR/EIS)	
H-4 Surface runoff from the active landfill module, provided it has not come in contact with waste, shall be collected via temporary diversion ditches which shall be constructed in each module or cell during the period it remains open for landfilling. Uncontaminated stormwater runoff shall be diverted to an unlined collection sump or sedimentation pond. Stormwater that comes in contact with waste at the active face of the landfill shall be retained within the leachate management system. (Draft EIR/EIS)	
H-5 Stormwater runoff shall be diverted to an unlined collection sump and reused for dust control within the active work area only. The sump shall be designed to hold the runoff from the 100-year, 24-hour storm event and shall be immediately repaired and enlarged if overfilling or erosion damage occurs. (Draft EIR/EIS)	
H-6 The landfill shall be protected from the 100-year flood. Engineered berms (or approved alternative redesign or protection measure) shall be constructed on the perimeter of the landfill to protect the portions of Landfill Cell Nos. 11, 12, and 18 (per the refined landfill plan) from the 100-year floodplain. (Supplement)	
H-7 In consultation with the County Land Development Department (Engineering/Drainage Section), Rail•Cycle shall monitor and map drainage flows in the affected area of Chambless Wash. Based on this monitoring and in consultation with the County Land Development Department, protective measures, if any, would be identified prior to developing this portion of the site. (Final)	
GROUND WATER	
GW-1 To reduce the quantity of water required by the proposed action (Draft EIR/EIS): • Low-flow plumbing fixtures shall be installed in onsite facilities. • Washwater from cleaning waste containers shall be collected, treated, and reused for container washing. • Surface runoff from the landfill shall be retained in the sedimentation basin, and if necessary, treated and used for dust control.	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS
(Continued)

MITIGATION MEASURES(1)	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
GROUND WATER (Continued)	
GW-2 Total onsite ground water pumping rates at the onsite well shall be limited to 1,400 gallons per minute for the duration of the initial construction period (approximately 90 days) and 100 gallons per minute on average, for the remaining duration of the active life of the landfill (60 to 100 years). (Supplement)	
GW-3 A perimeter gas monitoring system and a vadose zone monitoring system (beneath the landfill liner) shall be implemented to provide early warning of landfill gas migration. (Draft EIR/EIS)	
GW-4 The composite liner system, leachate collection system, landfill gas collection system, and final cover are designed to prevent contamination to underlying ground water. The components of the landfill liner or their equivalent which shall be installed are: (Final) - Prepared sloped subgrade. - Vadose zone monitoring system. - 60-mil HDPE (secondary liner) or equivalent flexible membrane liner (FML). - Geonet drainage layer and collection trench and pipe (secondary collection). - Geosynthetic clay liner (primary liner). - 60-mil HDPE (primary liner) or equivalent FML. - Geonet drainage layer collection trench and pipe (primary collection). - Nonwoven geotextile silt filter layer. - A 2-foot thick protective soil layer. - Selected waste (initial lift will be screened to remove objects that could damage liner).	
GW-5 Two leachate collection systems shall be constructed in each cell: one directly above the top FML, and the other between the top FML and the geosynthetic clay liner. (Draft EIR/EIS)	
GW-6 The final cover shall consist of the following components or equivalents: (Final) • Two-foot thick foundation layer. • One and one-half feet of clay (or equivalent having a permeability of 1 x 10^{-7} cm/sec) or less. • Two to three feet of topsoil.	
GW-7 Point of compliance monitoring wells shall be spaced along the downgradient edges of the landfill footprint to provide a detection monitoring system. Screened intervals and the specific location of these wells shall be determined in consultation with the RWQCB. (Draft EIR/EIS)	
GW-8 Ground water and landfill gas monitoring systems have been designed to detect contamination in the event that ground water contamination occurs. If water protection standards are exceeded, Rail•Cycle shall implement a corrective action program to remediate the affected ground water. (Draft EIR/EIS)	
GW-9 A financial assurance program, funded by Rail•Cycle shall be established to pay entities involved, including the federal government, for increased purification costs or loss of a mineral resource. (Draft EIR/EIS)	
GW-10 Excavation prior to landfilling shall be based on the highest anticipated ground water elevations (i.e., without pumping from nearby wells such as those operated by Cargill) and capillary rise, and shall be designed to offset the expected ground settlement while maintaining a minimum separation of 5 feet between waste and ground water. (Draft EIR/EIS)	
GW-11 If leachate evaporation ponds are used at the site, they shall be double lined, with a leachate collection system located between the liners to act as a monitoring system. Lysimeters shall be installed beneath the leachate evaporation ponds. (Supplement)	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Page 1 of 13

MITIGATION MEASURES[1]	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS[2]
GEOLOGY AND SOILS	
G-1 Structures onsite shall be engineered and constructed per the uniform building code to withstand the maximum probable acceleration with little or no damage. (Draft EIR/EIS)	• None.
G-2 The landfill shall be designed and constructed as required by CCR title 14 and title 23 to withstand the expected ground motions and potential effects of seismic stability, liquefaction, subsidence and differential settlement. (Draft EIR/EIS)	
G-3 A postearthquake inspection plan shall be developed. An inspection of the structures and landfill shall be conducted after a m5.0 or greater earthquake within 50 miles of the site. Damage incurred during a seismic event shall be mitigated as soon as practical after the event. (Draft EIR/EIS)	
G-4 Excavation prior to landfilling shall be based on the highest anticipated ground water elevations (i.e., Without pumping from nearby wells such as those operated by Cargill) and capillary rise, and shall be designed to offset the expected ground settlement while maintaining a minimum separation of 5 feet between waste and ground water. (Draft EIR/EIS)	
G-5 Landfill pipes and elements shall be designed to withstand or reduce forces applied by settling waste. Flexible or adjustable connections shall be used for piping at interfaces between cells and around the landfill perimeter. (Draft EIR/EIS)	
G-6 A monitoring plan shall be developed to evaluate whether the leachate and landfill gas collection systems are operating efficiently. (Draft EIR/EIS)	
G-7 Clay cover materials shall be specified and monitored to minimize settlement of landfill cover and to assure the integrity of the cover and surface drainage systems. (Draft EIR/EIS)	
G-8 Waste disposal shall not take place in a cell until a subsurface geologic investigation has confirmed that the cell is free of holocene faulting or other geologic hazards. The subsurface investigation may consist of geologic logging of cell walls during cell excavation or by other means approved by the RWQCB and county geologist. Should active faulting or geologic hazards be encountered, appropriate setbacks shall be provided and if necessary, the cell(s) shall be reconfigured within the approved limits of the landfill. (Final)	
MINERAL RESOURCES	
M-1 The composite liner system, leachate collection system, landfill gas collection system, and final cover are designed to prevent contamination to underlying ground water. The components of the landfill liner or their equivalent which shall be installed are: (Final) • Prepared sloped subgrade. • Vadose zone monitoring layer. • 60-mil HDPE (secondary liner) or equivalent flexible membrane liner (FML). • Geonet drainage layer and collection trench and pipe (secondary collection). • Geosynthetic clay liner (primary liner). • 60-mil HDPE (primary liner) or equivalent FML. • Geonet drainage layer collection trench and pipe (primary collection). • Nonwoven geotextile silt filter layer. • A 2-foot thick protective soil layer. • Selected waste (initial lift will be screened to remove objects that could damage liner).	• None.
M-2 Ground water and landfill gas monitoring systems have been designed to detect contamination in the event that ground water contamination occurs. If water protection standards included in the WDRs are not met, Rail•Cycle shall implement a corrective action program to remediate the affected ground water. (Draft EIR/EIS)	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS
(Continued)

MITIGATION MEASURES[1]	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS[2]
MINERAL RESOURCES (Continued) M-3 A financial assurance program, funded by Rail•Cycle shall be established to pay entities involved, including the federal government, for increased purification costs or loss of a mineral resource. (Draft EIR/EIS) M-4 Dust and other airborne contaminants which could potentially impact salt evaporators shall be controlled by frequent watering of unpaved roads and working areas, and operation of a landfill gas collection system. (Draft EIR/EIS)	
HYDROLOGY H-1 Stormwater run-on and runoff control structures, including temporary and permanent diversion ditches, sedimentation and retention basins, shall be designed, constructed and maintained for the 100-year, 24-hour storm. (Supplement) H-2 An earthen drainage channel shall be constructed to intercept and divert the stormwater to the perimeter drainage channel system along the east and west boundaries of the proposed landfill. This channel shall collect water flowing south of the railbed, redirect it around the perimeter of the landfill, and discharge it from the south side of the site. This channel shall also intercept sheet flow runoff from the unloading area and railyard, and other nonlandfill areas adjacent to the channels. (Draft EIR/EIS) H-3 Sedimentation basins and energy dissipaters shall be installed at the discharging end of the drainage channels to reduce flow velocity and resulting erosion. (Draft EIR/EIS) H-4 Surface runoff from the active landfill module, provided it has not come in contact with waste, shall be collected via temporary diversion ditches which shall be constructed in each module or cell during the period it remains open for landfilling. Uncontaminated stormwater runoff shall be diverted to an unlined collection sump or sedimentation pond. Stormwater that comes in contact with waste at the active face of the landfill shall be retained within the leachate management system. (Draft EIR/EIS) H-5 Stormwater runoff shall be diverted to an unlined collection sump and reused for dust control within the active work area only. The sump shall be designed to hold the runoff from the 100-year, 24-hour storm event and shall be immediately repaired and enlarged if overfilling or erosion damage occurs. (Draft EIR/EIS) H-6 The landfill shall be protected from the 100-year flood. Engineered berms (or approved alternative redesign or protection measure) shall be constructed on the perimeter of the landfill to protect the portions of Landfill Cell Nos. 11, 12, and 18 (per the refined landfill plan) from the 100-year floodplain. (Supplement) H-7 In consultation with the County Land Development Department (Engineering/Drainage Section), Rail•Cycle shall monitor and map drainage flows in the affected area of Chambless Wash. Based on this monitoring and in consultation with the County Land Development Department, protective measures, if any, would be identified prior to developing this portion of the site. (Final)	• Extraction of an additional annual average of 130 acre-feet of water will be a significant unavoidable adverse impact because the aquifer is considered to be in overdraft at this time.
GROUND WATER GW-1 To reduce the quantity of water required by the proposed action (Draft EIR/EIS): • Low-flow plumbing fixtures shall be installed in onsite facilities. • Washwater from cleaning waste containers shall be collected, treated, and reused for container washing. • Surface runoff from the landfill shall be retained in the sedimentation basin, and if necessary, treated and used for dust control.	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

(Continued)

Page 3 of 13

MITIGATION MEASURES(1)	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
GROUND WATER (Continued)	
GW-2 Total onsite ground water pumping rates at the onsite well shall be limited to 1,400 gallons per minute for the duration of the initial construction period (approximately 90 days) and 100 gallons per minute on average, for the remaining duration of the active life of the landfill (60 to 100 years). (Supplement)	
GW-3 A perimeter gas monitoring system and a vadose zone monitoring system (beneath the landfill liner) shall be implemented to provide early warning of landfill gas migration. (Draft EIR/EIS)	
GW-4 The composite liner system, leachate collection system, landfill gas collection system, and final cover are designed to prevent contamination to underlying ground water. The components of the landfill liner or their equivalent which shall be installed are: (Final) - Prepared sloped subgrade. - Vadose zone monitoring system. - 60-mil HDPE (secondary liner) or equivalent flexible membrane liner (FML). - Geonet drainage layer and collection trench and pipe (secondary collection). - Geosynthetic clay liner (primary liner). - 60-mil HDPE (primary liner) or equivalent FML. - Geonet drainage layer collection trench and pipe (primary collection). - Nonwoven geotextile silt filter layer. - A 2-foot thick protective soil layer. - Selected waste (initial lift will be screened to remove objects that could damage liner).	
GW-5 Two leachate collection systems shall be constructed in each cell: one directly above the top FML, and the other between the top FML and the geosynthetic clay liner. (Draft EIR/EIS)	
GW-6 The final cover shall consist of the following components or equivalents: (Final) • Two-foot thick foundation layer. • One and one-half feet of clay (or equivalent having a permeability of 1 x 10^{-7} cm/sec) or less. • Two to three feet of topsoil.	
GW-7 Point of compliance monitoring wells shall be spaced along the downgradient edges of the landfill footprint to provide a detection monitoring system. Screened intervals and the specific location of these wells shall be determined in consultation with the RWQCB. (Draft EIR/EIS)	
GW-8 Ground water and landfill gas monitoring systems have been designed to detect contamination in the event that ground water contamination occurs. If water protection standards are exceeded, Rail•Cycle shall implement a corrective action program to remediate the affected ground water. (Draft EIR/EIS)	
GW-9 A financial assurance program, funded by Rail•Cycle shall be established to pay entities involved, including the federal government, for increased purification costs or loss of a mineral resource. (Draft EIR/EIS)	
GW-10 Excavation prior to landfilling shall be based on the highest anticipated ground water elevations (i.e., without pumping from nearby wells such as those operated by Cargill) and capillary rise, and shall be designed to offset the expected ground settlement while maintaining a minimum separation of 5 feet between waste and ground water. (Draft EIR/EIS)	
GW-11 If leachate evaporation ponds are used at the site, they shall be double lined, with a leachate collection system located between the liners to act as a monitoring system. Lysimeters shall be installed beneath the leachate evaporation ponds. (Supplement)	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

(Continued)

MITIGATION MEASURES(1)	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
VEGETATION V-1 Areas on which no project-related facilities are to be located shall be protected and avoided to the degree possible, during project construction and operations. (Draft EIR/EIS) V-2 Construction and operations vehicles shall be restricted to paved roads or designated unpaved roads. (Draft EIR/EIS) V-3 Construction support yards shall be restricted, to the extent possible, to areas previously disturbed by construction activities. (Draft EIR/EIS) V-4 Landfill cells shall be revegetated as a final step in the closure of each cell. (Draft EIR/EIS) V-5 A revegetation plan shall be developed utilizing applicable methods developed by the National Park Service (NPS) at the Joshua Tree National Monument. This plan shall be developed in consultation with the NPS and shall include a native plant seed mixture to be used for revegetation. (Final) V-6 A nursery shall be established for germination and growth of native plants for use in revegetation of the landfill. Native plant seedlings grown in the nursery shall then be transplanted to closed landfill cell structures and planted in an island configuration, similar to the surrounding plant communities. (Final) V-7 Overhead sprinklers may be temporarily used on the landfill sideslopes to assist in the initial establishment of irrigation revegetation; however, only a drip irrigation system shall be used on the top slopes of the landfill. If long-term irrigation is required on the sideslopes a drip system shall be installed. (Final) V-8 The topsoil layer shall be 2 to 3 feet and contoured with ridges and depressions. (Final) V-9 Wood chips or mulch shall be used as required to control wind and rain erosion. (Final)	• None.
WILDLIFE(3) W-1 Rail•Cycle shall designate a "Field Contact Representative" who will be responsible for overseeing compliance with these terms and conditions and for coordination on compliance with the BLM. The Field Contact Representative shall have the authority to halt all construction, operation, and maintenance activities that are in violation of terms and conditions. The Field Contact Representative shall have a copy of all terms and conditions. The Field Contact Representative may be a manager, any other employee, or a contracted biologist. (USFWS) W-2 An employee education program shall be received, reviewed, and approved by the USFWS at least 15 days prior to the presentation of the program. The program shall consist of a class or video presented by a qualified biologist (a knowledgeable desert tortoise biologist approved by the USFWS). Wallet-sized cards with important information for workers to carry are recommended. All employees engaged in activities which may result in a take of desert tortoise shall participate in the education program prior to initiation of work. The program shall cover the following topics at a minimum: (USFWS) • Distribution of the desert tortoise • General behavior and ecology of the desert tortoise • Sensitivity to human activities • Legal protection • Penalties for violations of state and federal law • Reporting requirements • Project terms and conditions	• None.

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

(3) The wildlife mitigation measures referenced as USFWS are taken directly from the August 4, 1993 Biological Opinion from the USFWS for the proposed action (see Appendix D of the Supplement).

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

(Continued)

Page 5 of 12

MITIGATION MEASURES[1]	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS[2]
WILDLIFE[3] (Continued)	
W-3 Only biologists authorized by the USFWS shall handle desert tortoises. Rail•Cycle shall submit the name(s) of the proposed authorized biologist(s) to the USFWS for review and approval at least 15 days prior to the onset of activities. No construction or operational activities shall begin until an authorized biologist is approved. (USFWS)	
W-4 The authorized biologist shall be required on-site during all construction phase activities which may result in a "take" of desert tortoises to monitor construction and minimize take. Construction phase activities include: • Initial landfill and leachate collection system • Portions of the railyard and off-loading facility to support a minimum of two trains • Hazardous waste temporary storage area • Lined evaporation pond(s), if required • Water supply and storage facilities • Fencing of the site • Utilities network • Entrance/on-site service roads and railroad overpass • Public waste drop-off facility • Visitor center and administration facilities • Equipment maintenance facilities • Fuel storage sites This biologist shall have authority from Rail•Cycle to halt any action that might result in harm to a desert tortoise. (USFWS)	
W-5 Except when absolutely required by the operation, cross-country vehicle use by employees shall be prohibited during work and nonwork hours. (USFWS)	
W-6 The boundaries of construction areas shall be clearly marked with flagging or stakes. All construction workers shall strictly limit their activities and vehicles to marked areas to eliminate adverse impacts to desert tortoises. All workers shall be instructed that their activities are restricted to marked areas. (USFWS)	
W-7 Construction phase activities shall be modified, if possible, to avoid direct impacts to desert tortoises and their burrows. If a desert tortoise or its burrow is found in an area to be disturbed by construction, the qualified or authorized biologist shall work with the construction supervisor to take steps as necessary, including minor relocation of project features, to avoid damaging a burrow or disturbing a desert tortoise. For burrows outside of the actual area of disturbance, the biologist shall consider the direction the burrow runs, and that burrows may be as long as 30 feet, in determining whether or not action is necessary to avoid take. Any hazards to desert tortoises that may be created, such as auger holes and trenches, shall be monitored by a qualified or authorized biologist at least twice daily for desert tortoises which might become entrapped. (USFWS)	
W-8 If, throughout the project life, desert tortoises are found above ground or within burrows in areas to be disturbed by construction or operation of the landfill, it is not possible to avoid such disturbance, and the desert tortoise(s) could be injured or killed by such activities, they shall be relocated by an authorized biologist (see W-7 for definition) a short distance away from the construction zone to habitat which will not be disturbed by further construction or operation activities. If construction activities are short in duration, the authorized biologist may elect to hold the desert tortoise overnight (pursuant to W-17) and release the animal the next day at or near the point of capture after construction activities have been completed. If the relocation occurs in the season of above-ground activity, the desert tortoise shall be placed in the mouth of a burrow of appropriate size or in the shade of a large shrub. If the relocation is not in the season of above-ground activity, the desert tortoise shall be moved on a	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

(3) The wildlife mitigation measures referenced as USFWS are taken directly from the August 4, 1993 Biological Opinion from the USFWS for the proposed action (see Appendix D of the Supplement).

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS
(Continued)

MITIGATION MEASURES(1)	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
WILDLIFE(3) (Continued)	
seasonably warm day and placed at the mouth of a burrow of appropriate size. All excavation of desert tortoise burrows shall be done by hand tools, either by or under the direction of a qualified biologist. If the relocation occurs outside of the season of above-ground activity and the desert tortoise does not enter the burrow, or a burrow is not available, an artificial burrow shall be constructed and the desert tortoise placed within it. Artificial burrows shall be at least 6 feet in length and of the same diameter, depth, and orientation as the one in which the desert tortoise was found or as appropriate for the size of the subject desert tortoise. Wood or plastic materials may be used to strengthen the tunnel and/or chamber of the burrow. In coordination with the USFWS, the authorized desert tortoise biologist shall be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely. (USFWS)	
W-9 All relocated desert tortoises shall be marked for future identification. An identification number using the acrylic paint/epoxy covering technique shall be placed on the fourth left costal scute as described in the handling protocol sections of the "Protocols for Handling Live Tortoises" (Arizona Game and Fish Department et al. 1991). Slide photographs (35mm) shall be taken of the carapace, plastron, and fourth costal scute. No notching is authorized. (USFWS)	
W-10 If desert tortoise eggs are located during construction or operation and may be damaged by such activities, they shall be moved in accordance with Attachment A of the general handling protocol sections of the "Protocols for Handling of Live Tortoises" (Arizona Game and Fish Department et al. 1991). If desert tortoise eggs are incubated in a holding facility and the eggs hatch, the USFWS shall be contacted within five days of hatching concerning disposition of the hatchlings. (USFWS)	
W-11 Desert tortoises and their eggs shall be handled only by the authorized biologist and only when necessary. In handling desert tortoises, the authorized biologist shall follow general handling protocols (Arizona Game and Fish Department et al. 1991). New latex gloves shall be used when handling each desert tortoise to avoid the transfer of infectious diseases between animals. Replacement of lost fluids with a syringe is not authorized. If a desert tortoise needs to be moved within three hours of nightfall, or when ambient temperatures are extremely low (i.e., less than 40 degrees Fahrenheit) or high (exceeds 90 degrees Fahrenheit), it shall be placed in a clean disposable cardboard box and held overnight in a cool location. The box shall be covered and kept in possession of an authorized biologist for release of each desert tortoise the next morning in the manner described in W-12. Cardboard boxes used to hold desert tortoises shall be new, used once, and discarded. All materials which come into contact with desert tortoises shall be used only once and then properly discarded to minimize contact with the causative factor(s) for URTD or other diseases. (USFWS)	
W-12 The authorized biologist shall maintain a record of all desert tortoises handled. This information shall include for each desert tortoise: (USFWS) • The locations (narrative and maps) and dates of observations. • General condition and health, including injuries and state of healing and whether animals voided their bladders. • Location moved from and location moved to. • Diagnostic markings (i.e., identification numbers or marked lateral scutes). • Slide photograph (35mm) of each handled desert tortoise.	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

(3) The wildlife mitigation measures referenced as USFWS are taken directly from the August 4, 1993 Biological Opinion from the USFWS for the proposed action (see Appendix D of the Supplement).

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

(Continued)

MITIGATION MEASURES[1]	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS[2]
WILDLIFE[3] (Continued)	
W-13 Prior to moving a vehicle, workers shall inspect for desert tortoises under the vehicle. If a desert tortoise is present, the authorized biologist shall carefully move or direct the movement of the vehicle only when the desert tortoise would not be injured, or the desert tortoise shall be allowed to move out from under the vehicle on its own. (USFWS)	
W-14 Rail•Cycle shall participate in a cooperative raven survey with the BLM. The survey shall be a regional study to assess the density and location of ravens within a 30-mile radius of the project site. The raven study, initiated in December 1992, shall continue for one year prior to the startup of landfill operations. The study may be conducted up to five years following the startup of operations. Should monitoring indicate that, despite passive control measures taken at the landfill, the raven population is significantly increasing and is threatening desert tortoise populations, then the BLM and the project proponent shall coordinate with the USFWS to develop further measures, including alteration of landfill operations, or any other measures necessary to eliminate the threat. The BLM and the project proponent shall coordinate all study efforts and results through a raven monitoring control group. The control group should have representation from the BLM, USFWS, DFG, Rail•Cycle, and any other agency representative or individual that the state and Federal agencies believe appropriate. The raven monitoring control group would oversee the raven monitoring and control program, evaluate monitoring data, and make decisions on the timing and implementation of actions to reduce raven use of the landfill. (USFWS)	
W-15 With the exception of storm water retention ponds, no ponded water shall remain onsite for more than 24 hours to avoid watering of potential desert tortoise predators. Fish-netting would be erected above all storm water retention ponds to exclude avian predators. (USFWS)	
W-16 All trash and food items shall be promptly contained within closed, raven-proof containers. The containers shall be regularly emptied and/or removed from the project site to reduce attractiveness of the area to ravens and other desert tortoise predators. (USFWS)	
W-17 Structures that may function as raven nesting or perching sites, such as fences and overhead power lines, shall be designed and maintained to limit their usefulness as perches and nest sites to the extent possible. (USFWS)	
W-18 Daily, intermediate, and final cover shall be maintained in accordance with CCR Title 23. The cover material shall be applied as follows: (USFWS) • Daily cover shall consist of a 6-inch thick layer of soil or an equivalent alternative cover if permissible under the solid waste facilities permit. • Intermediate cover shall be applied to all landfill waste when the area is to be left for an extended period of time (i.e., intermediate slope between cells) while landfilling operations are carried on in adjacent cells. • Final cover shall be applied in accordance with the closure/postclosure requirements of the solid waste facilities permit. Beginning with cell No. 1, and following maximum filling of the cell, closure plans will be enacted. The cell shall be planted with typical native desert flora.	
W-19 Debris fencing and facility operations shall be designed and installed to prevent wind-transport of trash. During high wind periods, landfilling operations shall be carried out in wind-berm protected areas. Debris fences shall be maintained downwind from the working face to trap blowing debris. Debris fences shall be cleaned on a frequent basis, a minimum of once daily. Debris not collected on the fences shall be policed daily or on an as-needed basis to prevent cluttering of downwind areas. (USFWS)	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

(3) The wildlife mitigation measures referenced as USFWS are taken directly from the August 4, 1993 Biological Opinion from the USFWS for the proposed action (see Appendix D of the Supplement).

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

(Continued)

MITIGATION MEASURES(1)	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
WILDLIFE(3) (Continued) W-20 Nylon lines shall be erected and maintained over the working face of the landfill to deter ravens and other avian predators from feeding on exposed refuse. Surface impoundments shall have nylon lines erected to deter avian predators. (USFWS) W-21 The working face of the landfill shall be sized to control raven and other scavenger feeding. The working face shall be covered at the end of each working day and/or any period of time when work at the face is stopped due to unforeseen events, such as weather. (USFWS) W-22 No later than 90 days following completion of the construction phase, the FCR and/or biological monitor shall submit a report to the USFWS's Ventura Field Office. The report shall document the effectiveness of the desert tortoise mitigation measures, the number of desert tortoises excavated from burrows, and the number of desert tortoises moved from construction sites. The report shall make recommendations for modifying or refining these terms and conditions to enhance desert tortoise protection and reduce needless hardship on the project proponent. If desert tortoises are taken after completion of the construction phase, such take shall be reported to the USFWS pursuant to mitigations W-27 and W-28. (USFWS) W-23 Upon locating dead, injured, or sick desert tortoises, initial notification must be made to the USFWS's Law Enforcement Office in Torrance, California at (310) 297-0062 within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph, and any other pertinent information. The notification shall be sent to the USFWS's Torrance office with a copy to the Ventura Field Office. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. If possible, the remains of intact desert tortoises shall be placed with educational or research institutions holding the appropriate State and Federal permits. If such institutions are not available or the shell has been damaged, the information noted above shall be obtained and the carcass left in place. The carcass shall be marked in a manner that would not be toxic to other wildlife to ensure that it would not be rerecorded in the future. (USFWS) W-24 Arrangements regarding proper disposition of potential museum specimens shall be made with the institution prior to disposition. Injured animals shall be transported to a qualified veterinarian by an authorized desert tortoise biologist. Should any treated desert tortoises survive, the USFWS shall be contacted regarding the final disposition of the animals. (USFWS) W-25 An authorized biologist shall be designated as the only person permitted to handle any kit fox encountered during project construction or operation and shall be responsible for any relocation of kit fox during project construction or operation activities and shall maintain a record of all kit fox that are handled. (Draft EIR/EIS) W-26 Kit foxes located onsite shall be trapped and relocated to similar offsite environments in the near vicinity. (Draft EIR/EIS)	
AIR QUALITY AQ-1 Permanent onsite roadways shall be paved to minimize fugitive dust emissions. (Draft EIR/EIS) Roads which shall be used for an extended period of time (e.g., five to ten years) to haul containers from the railyard/offloading facility to the active working face shall also be paved. (Supplement) AQ-2 A miscellaneous crushed base shall cover unpaved roadways to minimize fugitive dust emissions. (Draft EIR/EIS) AQ-3 Unpaved roadways shall be sprayed regularly with water and/or chemical dust suppressants to minimize fugitive dust emissions. (Draft EIR/EIS)	• PM_{10} emissions, although reduced by mitigation measures, cannot be entirely mitigated. As the SEDAB is currently nonattainment for PM_{10}, any additional contribution to existing PM_{10} emissions will be a significant unavoidable adverse impact.

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

(3) The wildlife mitigation measures referenced as USFWS are taken directly from the August 4, 1993 Biological Opinion from the USFWS for the proposed action (see Appendix D of the Supplement).

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS
(Continued)

Page 9 of 13

MITIGATION MEASURES(1)	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
AIR QUALITY (Continued)	
AQ-4 Chemical binding agents shall be applied to cover stockpiles to minimize wind erosion emissions. (Draft EIR/EIS)	• NO_x and ROG emissions, although reduced by mitigation measures, cannot be entirely mitigated. As the SEDAB is nonattainment for O_3, any additional contribution to existing O_3 precursors will be a significant unavoidable adverse impact.
AQ-5 Construction sequence shall be designed to minimize double handling of cover soils. (Draft EIR/EIS)	
AQ-6 Daily cover or an alternative daily cover, as permitted, shall be placed over the compacted in-place waste during the day and over the working face at the end of each day to control odors. (Draft EIR/EIS)	
AQ-7 Completed landfill cells shall be revegetated to minimize wind erosion emissions. (Draft EIR/EIS)	
AQ-8 Low-sulfur diesel fuel of 0.05 percent shall be used to minimize SO_2 (PM_{10}) precursor emissions. (Draft EIR/EIS)	
AQ-9 Rail•Cycle shall use engines in heavy duty diesel trucks meeting advanced emission standards for highway vehicles. (Supplement)	
AQ-10 Landfill operating equipment shall be replaced when new equipment meeting higher standards becomes available. (Supplement)	
AQ-11 Rail•Cycle shall evaluate leachate and condensate treatment systems currently in use or proposed for use at other landfills. Depending on the results of this evaluation, and in consultation with the LEA, CIWMB, MDQAMD, and Planning Department, Rail•Cycle shall implement a specific method to control VOCs from the evaporation/or reintroduction of leachate and condensate at the landfill. (Supplement)	
AQ-12 Rail•Cycle shall determine, in consultation with the LEA and CIWMB, the optimum size of the working face to minimize VOC emissions. (Final)	
AQ-13 A landfill gas collection system and associated landfill gas flare or other permitted landfill gas control device shall be operated to minimize toxic air contaminant emissions. (Draft EIR/EIS)	
AQ-14 High combustion efficiency/low-NO_x flare shall be used to minimize O_3 precursor emissions. The flare shall be replaced as the project matures by a gas turbine and then a steam boiler, both capable of producing electricity, or alternative systems reflecting best available control technology at the time of energy recovery. (Draft EIR/EIS)	
AQ-15 Ridesharing and vanpool programs for landfill employees shall be implemented where feasible. (Draft EIR/EIS)	
AQ-16 Rail•Cycle shall contribute to funding of public transportation or ride sharing systems for local communities in the SEDAB. (Supplement)	
AQ-17 Rail•Cycle shall contribute to funding of a program to retire older, high pollution vehicles in the SEDAB. (Supplement)	
AQ-18 Rail•Cycle, through ATSF, shall actively participate in region-wide efforts to develop strategies to reduce locomotive emissions. (Final)	
PUBLIC HEALTH AND SAFETY	
PH-1 Rail•Cycle shall comply with state and federal procedures to provide prevention of and response to fires. (Draft EIR/EIS)	• None.
PH-2 Rail•Cycle shall include provision of facilities for fire and paramedic, including trained response personnel and equipment. (Draft EIR/EIS)	
PH-3 Fire extinguishers shall be located throughout the project site. (Final)	

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS
(Continued)

MITIGATION MEASURES[1]	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS[2]
PUBLIC HEALTH AND SAFETY (Continued) PH-4 Fire hydrants and hoses shall be located to service facilities. (Final) PH-5 In compliance with the County Fire Code, 180,000 gallons of water shall be reserved for firefighting purposes. (Draft EIR/EIS) PH-6 Rail•Cycle shall construct a new County fire station at the entrance to the landfill. (Draft EIR/EIS) PH-7 Water truck and tankers utilized in the landfill operation shall be available to support the dedicated fire engine, if needed. (Final) PH-8 Rail•Cycle shall site, design and construct a temporary hazardous waste storage area that meets the requirements of California Health and Safety Code Title 22. (Draft EIR/EIS) PH-9 Rail•Cycle shall comply with state and federal requirements, including preparation and implementation of Spill Prevention Control and Countermeasures (SPCC) plan and design, construction, and operation of facilities in accordance with the Oil Pollution Action of 1990, National Fire Protection Association guidelines, and Uniform Fire Code. (Draft EIR/EIS) PH-10 SPCC plan to include a prevention and response plan for small spills and leaks that can occur during mobile equipment fueling. (Draft EIR/EIS) PH-11 Areas or locations for storage of various lubricating oils, hydraulic fluids, and waste oils for recycling shall be designed and operated in accordance with an SPCC plan. Areas shall be properly signed, fenced, and constructed on a concrete pad with proper containment. (Draft EIR/EIS) PH-12 Design features shall be implemented to minimize operational spills and drips, and to collect spills and drips that occur for recovery and recycling. Fuel unloading equipment and onsite storage tanks that unload from the top to prevent spills shall be used/installed. (Draft EIR/EIS) PH-13 Site safety engineers and landfill personnel shall receive specific hazardous waste materials (HAZMAT) training for handling and disposing of hazardous material/waste. Personnel with HAZMAT training shall be onsite during landfill operating hours. Key safety engineers shall be on 24-hour call to respond to a HAZMAT incident. (Final) PH-14 Stored materials shall be identified as to their risk of fire, and adequate and proper containment shall be used. (Final) PH-15 Procedures for screening local inbound waste to Bolo Station, and training for operators at the MRFs (or other processing facilities), public drop-off facility and landfill working face, shall be implemented by the operator to preclude landfill disposal of hazardous wastes, and to minimize exposure to workers and other persons. (Draft EIR/EIS) PH-16 Rail•Cycle shall prepare site-specific community and employee right-to-know programs in accordance with state and federal requirements. (Draft EIR/EIS) PH-17 Controls including, but not limited to, litter and security fencing, litter policing and inspection, and response to vector issues shall be implemented to minimize nuisance vectors, litter, and odors. (Draft EIR/EIS) PH-18 The litter control program shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high wind velocity. (Supplement) PH-19 The optimum size of the working face for anticipated daily waste volumes and to minimize litter and odors shall be determined in consultation with the LEA and CIWMB. (Final)	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

(Continued)

Page 11 of 13

MITIGATION MEASURES(1)		SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
PUBLIC HEALTH AND SAFETY (Continued)		
PH-20	A solid waste disposal system shall be established at the project site to assure appropriate disposal. (Final)	
PH-21	Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations. (Final)	
VISUAL RESOURCES		
VR-1	The final surface shall be contoured in an undulating pattern so as to blend with surrounding topography. (Draft EIR/EIS)	• The presence of the landfill will permanently change the visual character of the site, due to the establishment of an artificial mound on the flat desert floor and long-term, industrial activity in a rural portion of the desert. The illumination of the night sky will also change the visual character of the desert locale.
VR-2	The final surface shall be revegetated for runoff control and to enhance visual blending with the surrounding area. (Draft EIR/EIS)	
VR-3	Procedures to prevent illegal dumping in the vicinity of the site shall be established and enforced as part of the site management plan. (Draft EIR/EIS)	
VR-4	Procedures to minimize the presence of litter on the operating landfill shall be established by Rail•Cycle as part of its site management plan. (Draft EIR/EIS)	
VR-5	Onsite lighting shall be directed inward and downward to minimize offsite illumination. (Draft EIR/EIS)	
VR-6	Onsite lighting shall be shielded. (Draft EIR/EIS)	
VR-7	Dust control measures shall be rigorously maintained to minimize emission of fugitive dust. (Draft EIR/EIS)	
CULTURAL RESOURCES		
C-1	Construction and operations personnel shall be briefed on the "no collection" policy for cultural resources that are present both onsite and offsite. (Draft EIR/EIS)	• None.
C-2	Information on prehistoric and historic land use of the project area shall be included in interpretive displays at the visitor's center. In addition, public information signs that advise of the provisions of the Archaeological Resources Protection Act of 1979, as amended and penalties for unauthorized artifact collection and disturbance of historic properties will be posted in the visitor's center. (Draft EIR/EIS)	
C-3	An archaeological monitor shall be present during grading and construction of the access road, and during subsequent development of landfill. (Draft EIR/EIS)	
C-4	Signs shall be placed along the landfill to indicate that the access road follows the National Old Trails Road. Turnouts at each end of the segments of the old road used as an access road will contain interpretive signs and information. (Draft EIR/EIS)	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

(Continued)

Page 12 of 13

MITIGATION MEASURES(1)		SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS(2)
PALEONTOLOGICAL RESOURCES		
P-1	Resource evaluation shall be conducted that includes known onsite resource localities and prioritizing of significant sites relative to focused research, scientific value, and potential for project effects. (Draft EIR/EIS)	• None.
P-2	Field salvage by a qualified paleontologist shall consist of the following (Draft EIR/EIS): • Inspection and removal of fossils at the most significant localities observed during previous field assessment. • Excavation monitoring to identify areas likely to contain significant paleontological resources.	
P-3	Compliance shall include identifying, curating, and permanently housing recovered fossils, and providing a report that indicates a paleontological resource mitigation program has been completed. (Draft EIR/EIS)	
P-4	Construction and operations personnel shall be briefed as to the proper procedures when working with a paleontological monitor and when fossils are discovered in an unmonitored situation. They shall also be briefed on the "no collection" policy for paleontological resources. (Draft EIR/EIS)	
TRANSPORTATION		
T-1	Turning lanes shall be provided on National Trails Highway at entrance to the site. (Draft EIR/EIS)	• None.
T-2	In the event that project implementation requires the importation of clay materials via trucks from a source that requires the use of Kelbaker Road for landfill construction, the applicant shall be responsible for a proportional share of the maintenance and repairs to Kelbaker Road from Interstate 40 to National Trail Highway, and National Trails Highway from Kelbaker Road to the project entrance. (Final)	
T-3	Trains hauling waste to the landfill shall be scheduled to operate in urban areas during late night or early morning hours. (Draft EIR/EIS)	
T-4	Ridesharing and vanpool programs for landfill employees shall be implemented. (Draft EIR/EIS)	
NOISE		
N-1	Rail•Cycle shall implement an employee hearing protection program that shall specifically address equipment operators and other personnel working on or near heavy equipment. (Draft EIR/EIS)	
N-2	Onsite structures within noise contours exceeding 65 dBA (400 to 500 feet from the landfill and 100 to 200 feet from offloading facility) shall be designed for appropriate noise attenuation. (Draft EIR/EIS)	
LAND USE		
L-1	A land exchange in fee shall occur consistent with BLM regulations and policies. (Draft EIR/EIS)	• The proposed action would represent a modification of the existing rural low intensive use of the site to an intensive industrial-type use.
L-2	Additional CEQA analysis shall be required if more than 250,000 cubic yards of clay must be imported to the landfill during any six-month period. (Final)	

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.2

MITIGATION MEASURES AND SUMMARY OF SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS
(Continued)

Page 13 of 13

MITIGATION MEASURES[1]	SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS[2]
SOCIOECONOMICS S-1 Rail•Cycle shall hire from the local labor force to the extent possible to minimize the effect on local population fluctuations. (Draft EIR/EIS) S-2 To the extent practicable, Rail•Cycle shall retain temporary construction personnel for permanent landfill employment positions. (Draft EIR/EIS) S-3 Rail•Cycle shall implement an ongoing training program so that persons initially hired for basic positions would be able to improve their skills and their employment status. (Draft EIR/EIS) S-4 Impacts to schools based on population increases within the project region would be mitigated indirectly through the development of new housing units and the assessment of developers' impact fees or establishment of a Community Facilities District ("Mello Roos" District) and tax assessment to fund construction of new school facilities. (Draft EIR/EIS) S-5 Telephone service shall be established at the project site to serve the landfill. (Draft EIR/EIS) S-6 A potable water supply and distribution system shall be established at the project site to serve the needs of landfill personnel, contractors, and visitors. (Draft EIR/EIS) S-7 Rail•Cycle shall make available to the appropriate LEAs and the CIWMB information within its control regarding waste volumes and recovery rates at MRFs from which waste is disposed of at Bolo Station. To the extent that such information is available, reports will include the following for each MRF sending residual waste to Bolo Station: (Final) • Gross waste receipts. • Total volume of materials diverted for purpose of recycling, composting, or reuse by major commodity type (i.e., paper products, glass, plastic, metals and yard wastes). • Total volume of residual waste transported to Bolo Station. • Location of major end-markets for diverted materials. S-8 A wastewater disposal system shall be established at the project site to assure appropriate disposal. (Draft EIR/EIS)	• Increased employment and population would accelerate consumption of local land and water resources. • The establishment of additional housing in the project area would introduce a concentration of population that currently does not exist.

91-109 (7/11/94/rmm)

---

(1) For reference purposes, a designation of the source of the mitigation measure is noted at the end of each measure. The designations are: (Draft EIR/EIS), (Supplement) referring to the Supplement to the Draft EIR/EIS, and (Final), referring to this Final EIR/EIS.

(2) For purposes of CEQA, a statement of overriding considerations is required for significant unavoidable adverse impacts. While NEPA does not have a similar requirement, this information will be useful to the decision makers during preparation of the Record of Decision for the EIS.

TABLE S.3

OVERVIEW OF ISSUES PUBLIC AND AGENCY COMMENTS DRAFT EIR/EIS AND SUPPLEMENT

- Purpose and need for the proposed action - The need for additional landfill capacity and the proposed actions impact on cities and counties compliance with AB 939..
- Project description - Landfill cover materials, liner system, landfill gas and leachate control, hazardous waste screening, and dust and litter control.
- Alternative site selection process.
- Alternatives to landfills - Requirements of AB 939.
- Geology and soils - Settlement and seismicity.
- Mineral resources - Brine quality and brine flow.
- Surface water hydrology - Flooding and stormwater control.
- Ground water - Integrity of the liner, monitoring system, and overdraft of the basin.
- Biological resources - Sensitive and protected species (i.e., desert tortoise) and revegetation.
- Air quality - Emissions in the high desert area, emissions from rail operations, health impacts, impacts on crops, assumptions used to quantify impacts from the No Action Alternative, and additional mitigation measures.
- Public health and safety - Control of vectors, hazardous waste screening, and County emergency response.
- Visual resources - Scenic values.
- Cultural and paleontological resources - Types of resources identified, and compliance with Section 106 of the National Historic Preservation Act.
- Transportation - Impacts in Los Angeles, Orange, Riverside, San Bernardino, and Kern counties, and hazards associated with rail transport of waste.
- Noise - Impacts in Los Angeles, Orange, Riverside, San Bernardino, and Kern counties, and sensitive land uses (i.e., residential, schools, and hospitals) along rail corridor.
- Land use - Consistency with the County General Plan (i.e., compatibility with adjacent land uses - Cargill and Cadiz Land Company [CLC], and open space element); and consistency with BLM's CDCA Plan, exchange of public lands, and proposed Mojave Desert National Park and National Wilderness Area.
- Socioeconomics - Increased population in desert, public services, housing, induced growth, and County's solid waste management system.

CHAPTER 1.0
CHANGES AND CORRECTIONS TO THE EIR/EIS

1.0 CHANGES AND CORRECTIONS TO THE EIR/EIS

1. The following section details minor changes or corrections to the EIR/EIS that were made in response to public and agency comments. Copies of the comments are located in Chapters 2.0 and 3.0 of this Final EIR/EIS, along with specific responses to those comments. The changes and corrections in this chapter do not alter the findings or conclusions of the EIR/EIS, but have been included in compliance with CEQA and NEPA.

1.1 CHANGES TO THE DRAFT EIR/EIS

1. The following changes and corrections have been made to the Draft EIR/EIS:

    - Section 2.6.3.2, Paragraph 2 - The summary states that the Porter-Cologne Water Quality Act was enacted in 1985. The correct year is 1970.
    - Section 2.6.1 - It is noted that the passage of AB 2494 has postponed the due date for CoIWMP until 18 months after issuance by the CIWMB, of regulations for the preparation of the plans. Since CIWMB has not issued these regulations, the January 1994 deadline has been postponed and no date has been established.
    - Figure 4.2.1 - This figure was not based on a USGS map. Rather the correct reference is Geologic Map of California published by CDMG. As this is a minor correction, the revised figure has not been included in this Final EIR/EIS.
    - Section 4.14.1.1.3 - Paragraph 3 should elaborate on AB 2296 to state that the approval of 50 percent of the County's population, and a majority of the 24 cities within the County, is required prior to the General Plan being amended to identify Bolo Station as a landfill on the Infrastructure/Improvement Level Maps, as the proposed Bolo Station Landfill is not included within the current County Solid Waste Management Plan.
    - Table 4.15.1, Footnote 2 - It is noted that Joshua Tree and Morongo Valley are unincorporated communities. As this is a minor correction, the revised table has not been included in this Final EIR/EIS.
    - Table 4.15.1, Note 3 has been updated and should now read: "Does not include approximately 20,000 military personnel and dependents assigned to the Twenty-nine Palms Marine Base (Jenkins, 1993)." As this is a minor correction, the revised table has not been included in this Final EIR/EIS.
    - Table 4.15.1, Footnote 4. The town of Lander should be spelled Landers. As this is a minor correction, the revised table has not been included in this Final EIR/EIS.
    - Section 4.15.2.2, Paragraph 1 under Mineral Extractions - The last paragraph is deleted due to duplication of the information appearing in the preceding paragraph.
    - Table 4.15.4 - The number of employees for Twenty-nine Palms Marine Corps Base has been updated and should now read 11,000 military employees and 1,400 civilian employees. As this is a minor correction, the revised table has not been included in this Final EIR/EIS.
    - Figure 5.2.1 - This figure has been refined to highlight faults in the project area identified by various comment letters. See Section 1.3 of this Final EIR/EIS for this refined figure.
    - Various mitigation measures included in the Draft EIR/EIS have been refined or eliminated as a result of the inclusion of additional measures in the Supplement and Final EIR/EIS. Table 1.1 of this Final EIR/EIS provides a listing of those measures included in the Draft EIR/EIS that have been refined or eliminated. A complete list of the mitigation measures incorporated in this EIR/EIS is provided in Table S.2 of this Final EIR/EIS.
    - Table 4.7.6 - This table has been revised to include the correct monthly maximum reported values for ozone (O_3). See Section 1.3 of this Final EIR/EIS for the revised table.
    - B-1, Appendix B - The following approval is included under County listings: "Site Identification and Description, LEA, Site Identification and Description Certification."
    - Appendix G, Tables G.4, G.5, and G.6 have been reorganized to reflect those species of wildlife observed during biological surveys and those species that are expected to be on the site but were not observed during the surveys. The tables have also been modified to specify that the species listed are for the vicinity of the Bolo Station site only. See Section 1.3 of this Final EIR/EIS for the revised tables.

1.2 CHANGES TO THE SUPPLEMENT

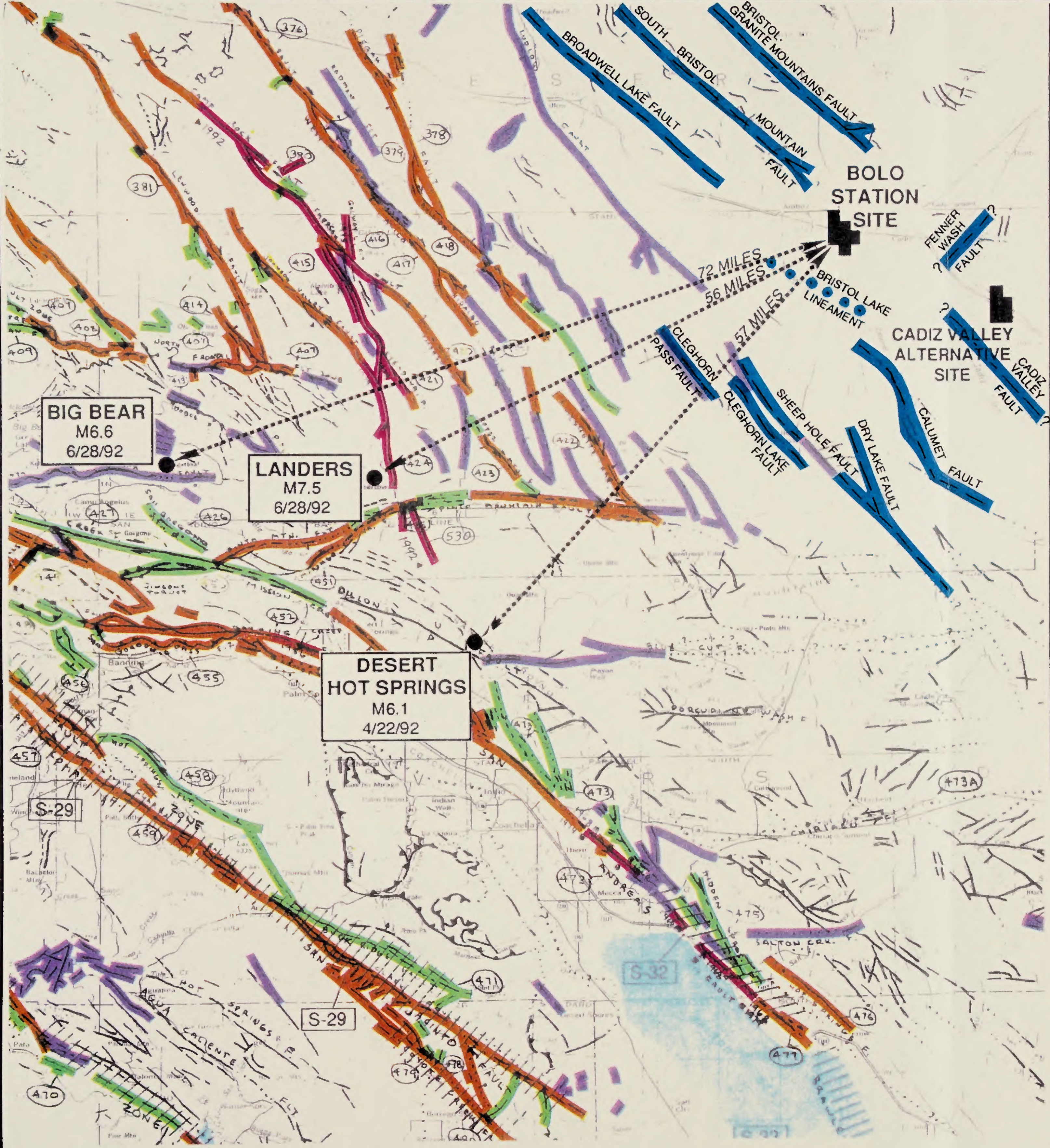
1. The following changes and corrections have been made to the Supplement:

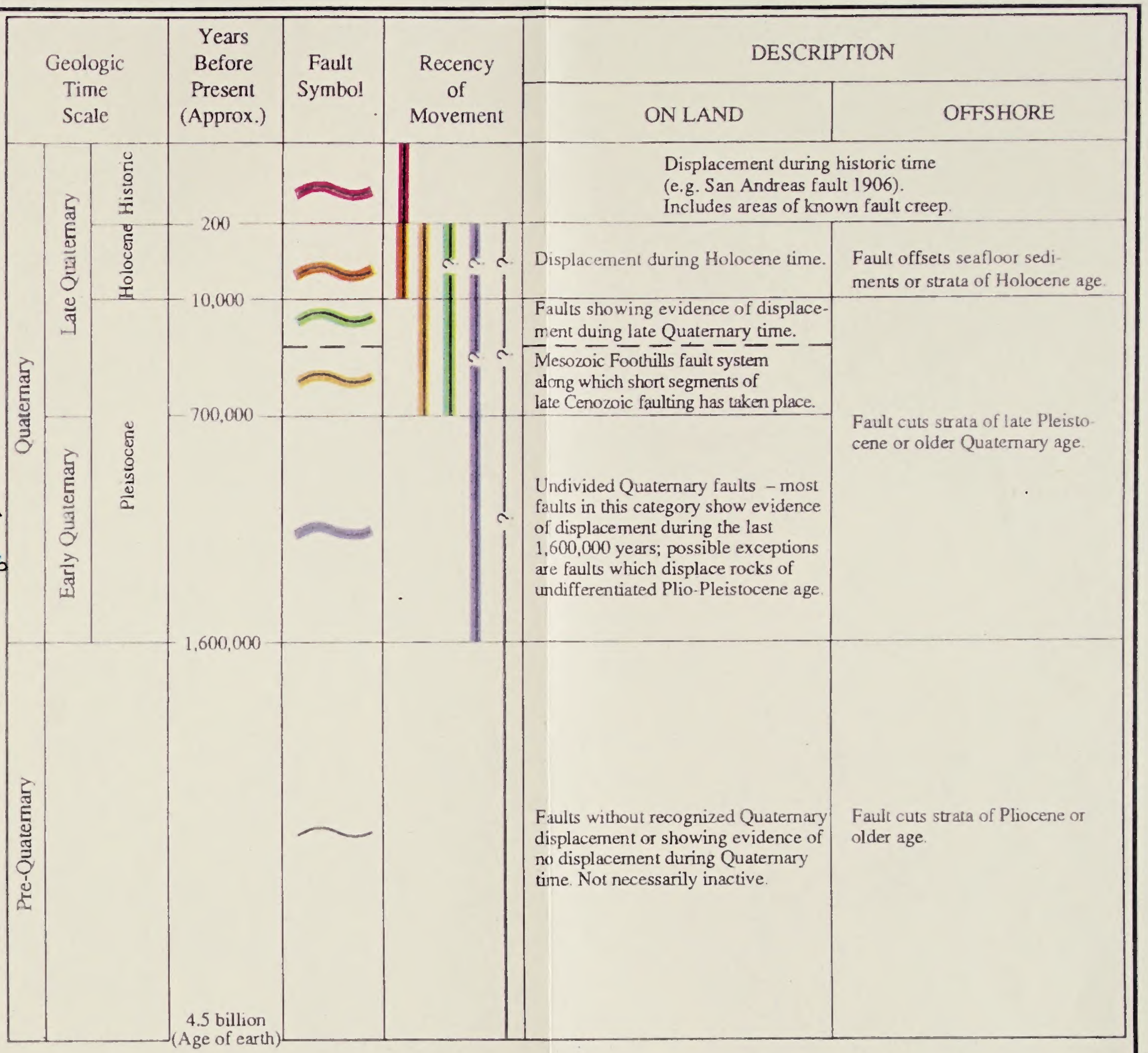
   - Table 3.2 - This table has been revised to indicate that the Niland site is not located on a major highway. As this is a minor correction, the revised table has not been included in this Final EIR/EIS.
   - Figure 3.5 - This figure has been revised to show the corrected location of the proposed Mesquite Mine. The revised figure is included in the Summary of this Final EIR/EIS (see S.6).
   - Figure 4.2.2 - The TDS contours have been corrected on this figure. See Section 1.3 of this Final EIR/EIS for the corrected figure.
   - Section 5.4.3.3, Paragraph 1 - This section has been revised to indicate that in December, 1993, the SEDAB portion of the County of San Bernardino was designated as a federal and state nonattainment area for PM_{10}.
   - Table 6.1 - This table of cumulative projects in the study region has been updated to reflect the change in status of various projects since the distribution of the Supplement. See Section 1.3 of this Final EIR/EIS for the revised table.

1.3 REVISED TABLES AND FIGURES

1. This section provides revised tables and figures from the Draft EIR/EIS and Supplement.

91-109 FEIR/EIS REV 6/20/94





Geologic Time Scale			Years Before Present (Approx.)	Fault Symbol	Recency of Movement	DESCRIPTION ON LAND	DESCRIPTION OFFSHORE
Quaternary	Late Quaternary	Historic	200	🟥		Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.	
		Holocene	10,000	🟧	?	Displacement during Holocene time.	Fault offsets seafloor sediments or strata of Holocene age.
		Pleistocene	700,000	🟩	?	Faults showing evidence of displacement during late Quaternary time.	Fault cuts strata of late Pleistocene or older Quaternary age.
				🟨		Mesozoic Foothills fault system along which short segments of late Cenozoic faulting has taken place.	
	Early Quaternary		1,600,000	🟪	?	Undivided Quaternary faults – most faults in this category show evidence of displacement during the last 1,600,000 years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age.	
Pre-Quaternary			4.5 billion (Age of earth)	—		Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive.	Fault cuts strata of Pliocene or older age.

NOTE.
SEE TABLE 5.2.2 FOR INFORMATION REGARDING ACCELERATIONS AT THE SITES FROM RECENT ACTIVITIES.

LEGEND

🟦 ?	FAULTS LISTED ON TABLE F.2 AND IDENTIFIED BY INVESTIGATION IN LITERATURE AND MAPPING. QUERIED WHERE FAULT NOT IDENTIFIED IN LITERATURE AND/OR MAPS.
● ● ● ● ●	AIR PHOTO LINEAMENT IDENTIFIED IN LITERATURE REFERENCED IN TABLE F.2

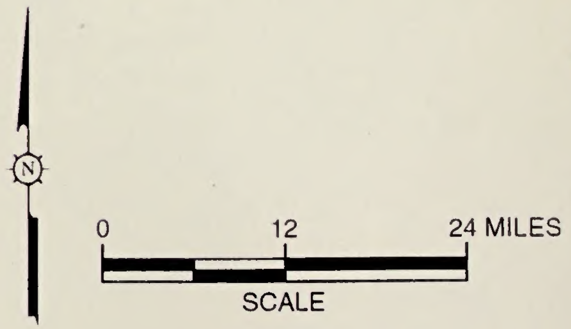


FIGURE 5.2.1

LOCATION OF RECENT SEISMIC ACTIVITY

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

REFERENCE:
"PRELIMINARY FAULT ACTIVITY MAP OF CALIFORNIA", COMPILATION AND INTERPRETATION
BY CHARLES W. JENNINGS FOR THE STATE OF CALIFORNIA DEPARTMENT OF CONSERVATION, 1992.

TABLE 1.1

MITIGATION MEASURES REFINED OR ELIMINATED SINCE THE DRAFT EIR/EIS

Page 1 of 8

REFINED OR ELIMINATED MITIGATION MEASURE	EXPLANATION[1]
GEOLOGY AND SOILS	
• Specifying and monitoring the construction of the landfill base grade (which will dictate the slope of the leachate collection system) to accommodate settlement without causing flow reversals	Replaced with Measure G-4 which reflects refined excavation requirements per the Supplement.
• Implementation of visual monitoring and periodic engineering surveys to evaluate clay cover integrity and surface drainage system effectiveness. Grading adjustments can be made, as required, to maintain the cover.	Integrated into monitoring program for Measure G-7.
MINERAL RESOURCES	
• The requirements of CCR Titles 14 and 23 are designed to protect the environment from impacts resulting from the implementation of the proposed action. The composite liner system, leachate collection system, landfill gas collection system, and final cover are designed to prevent leachates and landfill gas from contaminating the underlying ground water. Landfill gas and leachate collection systems will be designed to prevent accumulations of excess landfill gas and leachate within the landfill, thereby minimizing advective flow potential, should such flow be possible. In the event that contamination occurs, ground water, vadose zone, and landfill gas monitoring systems are being designed to detect contamination as soon as practical. If water quality protection standards are exceeded, Rail•Cycle would be required by CCR Title 23, Chapter 15, Article 5 to implement, in consultation with the LEA and RWQCB, a corrective action program to remediate the affected ground water. These and other mitigation measures recommended for the protection of ground water quality are discussed in Section 5.4 *(Draft EIR/EIS)* and would also serve to protect the mineral resources contained in the brines beneath and adjacent to the site.	Basic measure is included as condensed Measures M-1 (landfill systems, liner, and cover) and M-2 (monitoring systems and corrective action requirements). Additional ground water protection measures are detailed in Measures GW-3 through GW-10.
• In the event that ground water impairment occurred that could not be mitigated by the measures identified in Section 5.4 *(Draft EIR/EIS)* and either rendered the brine ore body useless or unprofitable, due to the implementation of the proposed action, it would be mitigated by a financial assurance program, funded by Rail•Cycle, payable to the entities involved, including the federal government, to compensate for the increased cost of purification or loss of a mineral resource. The amount of the financial program will be based on the potential mineral value of the brine ore body. The program may also include direct cleanup efforts by Rail•Cycle, via measures discussed in Section 5.4.	Measure condensed as Measure M-2.
• If subsequent evaluations indicate the additional pumping from the new well in the southern part of Section 9 would reduce the current Leslie Salt well yields, then depending on the severity of the impact, the pumping rate will be reduced from the Rail•Cycle wells, new wells shall be located further from the Leslie Salt wells, or a combination of these measures will be implemented, to reduce impacts to "less than significant."	As described in the Supplement, wells for onsite water use are currently proposed to be relocated to Section 33 (approximately one mile further away from the Section 9 location). New Measure GW-2 limits ground water use.
HYDROLOGY	
• Stormwater discharges from the project fall under recently approved EPA regulations (40 CFR, 122, 123, and 124) and the State Water Resources Control Board will require a NPDES permit. This permit will require regular monitoring (and possibly testing) of the perimeter drainage channels and retention ponds to ensure stormwater discharged to the playa does not contain from the landfill.	Requirement for NPDES permit is included in Compliance Record for Measures H-1 through H-6.
• The NPDES permit for discharge of stormwaters require the owner/operator to complete a SWPPP. This includes a Spill Prevention and Response Plan and a monitoring plan for RWQCB approval. The NPDES permit also requires the facility to implement "best management practices" (BMPs). Mitigation measures required by the NPDES permit will be implemented.	Requirement for NPDES permit is included in Compliance Record for Measures H-1 through H-6.
GROUND WATER	
• If further analyses and/or pump testing indicate that withdrawal of ground water from any Rail•Cycle wells is significantly affecting either the quantity of water available to the Leslie Salt wells (EW-3, EW-4, or EW-5), or the concentration of the brines at those wells, Rail•cycle will either reduce the pumping rate of their wells until the impact is reduced to a less than significant level, or relocate their well(s) to a location which does not impact the Leslie Salt wells. Impacts shall be based on current (1991) pumping rates from the Leslie Salt wells.	As described in the Supplement, wells for onsite water use are currently proposed to be relocated to Section 33 (approximately one mile further away from the Section 9 location). New Measure GW-2 limits ground water use.

---

(1) See Table S.2 for a listing of the mitigation measures included in this Final EIR/EIS. The numbered mitigation measures (i.e., G-4) correspond to the numbering used in Table S.2.

TABLE 1.1

MITIGATION MEASURES REVISED OR DELETED SINCE THE DRAFT EIR/EIS

(Continued)

REVISED OR DELETED MITIGATION MEASURE	EXPLANATION
GROUND WATER (Continued)	
• Rail•Cycle has proposed to replace the 1-foot clay layer of the final cap with a 40-mil HDPE liner. Under ideal conditions, the 1-foot of clay and the HDPE liner provide approximately the same protection. However, in a desert environment HDPE has a number of advantages: - It does not desiccate and crack like clay will. - It discourages root penetration and animals from burrowing. - It does not require water for installation. - It eliminates truck traffic which would otherwise be necessary to bring clay onto the site. The vegetative soil cover will be increased from 1-foot to 2-feet thick above the HDPE liner to prevent the breaching of the cap by plant roots.	Measure was condensed and refined to specify 2-3 feet soil cover as described in the Final EIR/EIS (see Measure GW-6).
• "Point of compliance" ground water monitoring wells, as required by CCR Title 23, will be installed on 1,000-foot centers along the downgradient perimeter of the landfill footprint. These wells will be sampled on a quarterly basis beginning one year prior to landfilling each respective cells, and will provide a secondary warning of a leak in the liner system.	Replaced by Measure GW-7. As noted in the revised measure, screened intervals and the specific location of the wells shall be determined in consultation with the RWQCB.
• A conceptual plan for monitoring of gas and liquid potentially released beneath the liner system in the unsaturated zone has been developed. Ambient air will be introduced beneath the liner and swept through the unsaturated zone. This air will be collected in perforated pipes running beneath the center of each landfill cell. Gases withdrawn from the pipes will be analyzed for constituents of concern. Based on the early and sensitive detection of gas releases provided by the unsaturated zone monitoring system, the extent of gas and/or a liquid release is expected to be minimal or non-existent. In addition, the dryness of the vadose zone and operation of the unsaturated zone monitoring is expected to evaporate any potential moisture released.	Condensed to specify actual mitigation measure (see Measure GW-3).
• If leachate or landfill gas generated by the project is determined to be contaminating ground water, a corrective action plan will be developed and implemented in conjunction with the RWQCB as required by CCR Title 23, Chapter 15. - Opening a landfill cell for liner repair is not expected to be a means of remediation except in extreme conditions. Control of releases will more likely be through the installation of gas wells or ground water pumping wells along the perimeter of the landfill. Ground water removed by pumping would be treated. Treated water could be used onsite, delivered to Leslie Salt or National Chloride for process water, or reinjected. - In the event additional remedial measures are deemed necessary, construction of a grout curtain or cutoff wall down-gradient of the release would isolate the release of contamination from ground water. Ground water from behind the ground curtain would be pumped and treated.	Condensed to only specify actual mitigation measure (see Measure GW-8).
• A corrective action program designed to remediate ground water contamination may compound the impacts to the Leslie Salt bring pumping wells if it includes a pump-and-treat component, which could create a cone of depression and thus reduce available brines at the wells. To avoid this additional impact, and since calcium chloride and sodium chloride requires purification, Rail•Cycle could implement a financial mechanism which would pay for the increased processing required to purify the final product.	Condensed to reflect actual mitigation measure. Monitoring program specifies that the program must be in place prior to final permitting for the landfill (see Measure GW-9).
VEGETATION *No measures were deleted or revised.*	-
WILDLIFE	
• Onsite vehicle speeds will be maintained under 20 mph (15 mph for trucks) during tortoise activity periods (spring, fall, and early morning and late evening in the summer).	This measure was deleted because it was not included in the terms and conditions of the USFWS Biological Opinion for the proposed project. As described in Measures W-1 and W-4, the designated Field Contact Representative/authorized biologist will monitor all construction activities and report to the USFWS on the effectiveness of mitigation measures. In accordance with Measure W-22, if required, the terms and conditions can be refined as required to enhance desert tortoise protection (i.e., including the implementation of a speed limit).

---

(1) See Table S.2 for a listing of the mitigation measures included in this Final EIR/EIS. The numbered mitigation measures (i.e., G-4) correspond to the numbering used in Table S.2.

TABLE 1.1

MITIGATION MEASURES REVISED OR DELETED SINCE THE DRAFT EIR/EIS

(Continued)

Page 3 of 8

REVISED OR DELETED MITIGATION MEASURE	EXPLANATION
WILDLIFE (Continued)	
• The working area of the site will be fenced to deter offsite tortoises from moving onto the site. Fences and power poles will be designed and installed to discourage perching by ravens.	Based on consultation between the BLM and USFWS, the requirement for fencing was not included in the terms and conditions of the USFWS Biological Opinion for the proposed project. It is the opinion of the BLM and USFWS that the presence of the Field Contact Representative (see Measure W-1) during construction will provide sufficient protection. Reference to discouraging perching by ravens is included in Measure W-17.
• As a precaution, initial land clearance prior to construction of the access road, in Section 22, and the eastern one-half of Section 15 will be monitored by a qualified desert tortoise biologist or person trained by a qualified biologist. While it is not anticipated that tortoises will be found, some tortoises from the east or north could move onto the site between the time of the surveys conducted to support the preparation of the EIR/EIS and consultation with the BLM and USFWS, and the construction period.	This measure was deleted because desert tortoise monitoring by the Field Contact Representative is required for all construction phase activities as included as Measure W-4, taken directly from the terms and conditions of the USFWS Biological Opinion.
• If necessary, relocation of tortoises will proceed using state-of-the-art techniques and animals will be located adjacent to the site boundary (north and east) with more favorable habitats during appropriate weather conditions. Unoccupied burrows of appropriate size nearest the point of capture shall be utilized as these may be familiar to the relocated animals. Alternatively, tortoises will be placed in the shade of shrubs if the weather is appropriate. Relocated animals will be observed for as long as is necessary (to be determined by a qualified desert tortoise biologist) to ensure the safety of the animals. Tortoises will be relocated to a site simulating the original nest site.	Language as to procedures for relocating tortoises provided by USFWS in the Biological Opinion and included as Measures W-3, W-8, W-9, W-10, W-11, W-12, W-23, and W-24.
• Each site would be caged initially in such a manner that predators will be excluded, but normal thermal conditions in the next will be maintained. Following a period of one month (in which time local predators should become habituated to initial disturbance at the nest site, cages may be removed).	Requirement to cage each site was not included by USFWS in the Biological Opinion.
• Any tortoise eggs found will be monitored periodically to determine progress of hatching and success of antipredation measures. Alternatively, cages may be kept in place through hatching as long as the nests are closely monitored through the hatching period such that hatchlings are not endangered.	Language as to procedures for dealing with tortoise eggs was provided by USFWS in the Biological Opinion and included as Measures W-10 and W-11.
• In other construction areas, tortoises sighed by workers will be relocated by a qualified desert tortoise biologist or other trained onsite personnel. Workers will be educated as to the natural history, endangerment factors for tortoises, and appropriate protocol for initiating relocation procedures. The latter will be established in consultation with tortoise biologists and agency biologists.	The Biological Opinion addresses these issues in several terms and conditions. These are included in Measures W-2 (Employee Education Program), W-3 (Authorized Biologist to Relocate Tortoises), and W-10, W-11 (Protocols for Relocating Tortoises).
• An education program will be developed to inform landfill employees of the habits of the desert tortoise the need to protect this species, what to do if they find a tortoise, and that harassing, killing, or collecting tortoise is illegal.	This measure is addressed in greater detail in the Biological Opinion Terms and Conditions. The provisions are included in Measures W-2 (Employee Education Program). W-3 (Approved Biologist to Handle Tortoises), and W-13 (Procedures if Tortoise Under a Vehicle).
• During the life of the facility, tortoises found onsite will be removed from danger and relocated using established protocol. Relocation will be completed by a qualified desert tortoise biologist or onsite personnel trained specifically for their function.	These issues are addressed in detail in the Biological Opinion Terms and Conditions. They are included in Measures W-8, W-9, W-10, W-11, W-12, W-24, and W-25.
• Fencing and facility operations will be designed such that trash does not blow out of the facility.	Litter control included as Public Health and Safety Measures PH-17, PH-18, and PH-19.
• To minimize tortoise entering the landfill site, special fencing (wire mesh) will be installed along the perimeter fence.	Deleted because it was determined by USFWS that monitoring would be effective mitigation.
• A nylon grid system or other approved method will be used over the active landfill working face to deter predatory birds. In the event a nylon grid system is not effective in controlling ravens and other bird species, other methods which have been effective at other landfills would be implemented. These include: distress tapes, propane cannons, racket bombs, and blank 0.22 caliber shells. As an operator of many landfills through the country, WMNA has an established bird control procedures (*sic*) and has prepared a bird control manual used at its landfills (WMNA, 1987).	The measure was condensed to specify the actual measure and reflects the USFWS's terms and conditions of the USFWS's Biological Opinion (see Measure W-20).
• Landfill cells will be revegetated during the final closure of each cell, minimizing the impact of onsite habitat loss.	This measure is included under Vegetation (see Measure V-4).

(1) See Table S.2 for a listing of the mitigation measures included in this Final EIR/EIS. The numbered mitigation measures (i.e., G-4) correspond to the numbering used in Table S.2.

TABLE 1.1

MITIGATION MEASURES REVISED OR DELETED SINCE THE DRAFT EIR/EIS

(Continued)

Page 4 of 8

REVISED OR DELETED MITIGATION MEASURE	EXPLANATION
WILDLIFE (Continued)	
• The above mitigation measures that involve a "take" of desert tortoise (as defined by the FSA to include handling and moving) will be included in the pending Section 7 consultation with USFWS. This consultation process will be initiated by BLM, based on data provided by Rail•Cycle and will be completed prior to the construction (*sic*) of the EIR/EIS process.	The Section 7 consultation has been completed. Measures from the Terms and Conditions of the Biological Opinion that resulted from the consultation are included as Measures W-1 through W-24.
• Conduct a regional raven baseline study and monitoring program in consultation with BLM and USFWS. Rail•Cycle has prepared a draft workplan for the baseline study and monitoring program and submitted it to the BLM in June 1992 for review and approval (Ecological Research Services, 1992f). As of October 1992, BLM has not completed its review of the workplan. The study is designed to provide baseline information on distribution and density of ravens prior to landfill development. During initial operation phase, the project region will be monitored so that changes in raven concentrations or densities can be detected early and brought to the attention of BLM and USFWS. Increases in raven density or attraction of a raven population to the desert valleys of the site vicinity may require additional mitigation measures, which Rail•Cycle would develop and accomplish in consultation with BLM and USFWS.	This measure is included in Measure W-14 as it was reworded by the USFWS in the Biological Opinion Terms and Conditions.
AIR QUALITY	
• Heavy duty diesel operational equipment, which meets or exceeds state and federal emission standards applicable at the time of equipment acquisition, will be used (based on equipment availability).	Refined by updated analysis included in the Supplement. See Measures AQ-9 and AQ-10.
• Use of locomotives to transport waste as opposed to trucks. The projected landfill capacity shortage in Los Angeles County along with SCAQMD support of out-of-basin transport of biodegradable solid waste strongly suggests long distance waste transportation scenarios.	Deleted because it is information and not an actual mitigation measure.
• Investigate potential air emission reductions to offset increases in project-related nonattainment and precursor emissions from closure of high desert landfills, and control of emissions from other, as yet unidentified, air contaminant emission sources.	Replaced by more specific measures included in the Supplement to offset emissions (see Measures AQ-16 and AQ-17).
• ATSF has an annual replacement program for their system fleet of locomotives. Each year new locomotives are added to their fleet, replacing older locomotives. ATSF is proactive with the Association of American Railroads and locomotive manufacturers working with CARB to improve locomotive performance criteria. This proactive approach will be continued to ensure that, as new locomotives are purchased "best available technology" is used so that locomotive emissions are continuously reduced.	Actions in this measure are included in Measure AQ-18.
PUBLIC HEALTH AND SAFETY	
• Compliance with the requirements of 40 CFR 112 and the California Health and Safety Code Chapter 6-67 of Division 20, including preparation and implementation of an SPCC Plan, as well as design, construction, and operation of facilities in accordance with the Oil Pollution Act of 1990, National Fire Protection Association guidelines, and Uniform Fire Code, will be implemented during design, construction and operation of the proposed action. This will reduce potential impacts to an insignificant level.	This measure was condensed to reflect actual requirements (see Measure PH-9). Reference to specific regulations was deleted.
• A temporary hazardous waste storage area will be sited, designed, and constructed at Bolo Station pursuant to CCR Title 22.	Measure was condensed to reflect actual requirement (see Measure PH-8). Other elements referenced in this measure are included in Measures W-9, W-15, W-18, and W-19.
• Hazardous material/waste exposure or disposal, nuisance and vectors, litter and odor, and public exposure are addressed by requirements of 40 CFR, Part 258, Subtitle D, and those of CCR Titles 14 and 23. Compliance with these requirements during design, construction and operation including preparation of operating guidelines will reduce potential impacts to an insignificant level. Requirements include necessary employee training, monitoring and recordkeeping.	
• Rail•Cycle will provide controls including, at a minimum, daily cover requirements to minimize nuisance, daily cover requirements to minimize nuisance, vectors, litter, and odors. Controls include, but are not limited to, litter and security fencing, litter policing and inspection, and response to vector problems.	Included as Measure PH-17, but without reference to daily cover. Reference to cover requirements (a regulatory issue) is included in Measure W-18.
• Rail•Cycle will follow procedures contained in 40 CFR, Part 258, Subtitle D, and CCR Titles 14 and 23. Compliance with these design, construction and operational procedures will provide prevention of and response in the event of potential fires and explosions.	Measure was condensed to reflect actual requirement (see Measure PH-1). Reference to specific regulations was deleted.

---

(1) See Table S.2 for a listing of the mitigation measures included in this Final EIR/EIS. The numbered mitigation measures (i.e., G-4) correspond to the numbering used in Table S.2.

TABLE 1.1

MITIGATION MEASURES REVISED OR DELETED SINCE THE DRAFT EIR/EIS

(Continued)

Page 5 of 8

REVISED OR DELETED MITIGATION MEASURE	EXPLANATION
PUBLIC HEALTH AND SAFETY (Continued)	
• Rail•Cycle will provide facilities for fire, paramedic and sheriff in coordination with the County Fire Warden including trained response personnel, equipment and facilities including reserve water supply for fire fighting.	Requirements of this measure are included under Measures PH-2 PH-3, PH-4, and PH-5.
• Rail•Cycle, in cooperation with the County Fire Warden, will develop a response plan and procedures for fire response and hazardous material response including appropriate procedures for the evacuation of employees and the public, downwind of surface or subsurface fire, or hazardous material incidents, if necessary.	Preparation of fire prevention and response plan included in Measures PH-1 through PH-5.
• Preparation of a site-specific community and employee right-to-know programs in accordance with state and federal requirements. California Health and Safety Code, Chapter 6.95 and CERCLA Title III, and Proposition 65. These programs will reduce potential public, worker and community impacts to an insignificant level.	Measure was condensed to reflect actual requirements (see Measure PH-16). Reference to specific regulatory requirements was deleted.
• Diesel fuel unloading from railway tank cars and/or tank trucks and fuel storage can result in cumulative effects over time from operational spills and drips. Design features will be implemented to by Rail-Cycle to minimize operational spills and drips, and to collect spills and drips that occur for recovery and recycling proper containment will also be prided. Rail•Cycle will install fuel loading and unloading equipment which operate from the top of tank cars and onsite storage tanks to prevent spills from bottom valves, and installation of track collection pans to contain smaller spills and leaks. Tanks will be equipped with overtopping prevention controls.	Measure was condensed to reflect actual requirement (see Measure PH-12). Specific reference to railroad cars or tracks was deleted, as Rail•Cycle no longer intends to transport diesel fuel to the site by rail.
• Areas or locations for storage of various lubricating oils, hydraulic fluids and waste oils for recycling will be designed and operated in accordance with an SPCC Plan including proper containment, and overtopping controls. Areas will be properly signed, fenced, and constructed on a concrete pad with proper containment.	Included as Measure PH-11. Reference to overtopping controls were deleted as Rail•Cycle no longer intends to transport diesel fuel to the site by rail.
• MRFs (including potential transfer stations) will provide primary inspection screen for hazardous and other special wastes. This screening greatly minimizes potential for inadvertent exposure during transport and landfill operations. The Bolo Station landfill facility .	Measure condensed and included as Measure PH-15.
VISUAL RESOURCES *No measures were deleted or revised*	–
CULTURAL RESOURCES	
• Information on prehistoric and historic land use of the project area, including native industries and habitation related to stands of Bristol Lake, as well as the history of the ATSF railroad, Bolo section camp, and the National Old Trails Road, will be included in interpretive displays at the visitor's center.	Measure was condensed and is included as Measure C-2.
• Public information signs that advise of the provisions of the Archaeological Resources Protection Act of 1979, as amended, and penalties for unauthorized artifact collection and disturbance of historic properties will be posted in the visitor's center.	Measure was condensed and included in Measure C-2
• An archaeological monitor will be present during grading and construction of the access road for a distance of 100 meters (300 feet) north and south of its development in the vicinity of site SBr-2910H.	Included as Measure C-3. Reference to distance north and south of Site SBr-2910H was deleted. The entire length of the access road shall be monitored during grading and construction.
• If necessary, a treatment plan will be prepared and implemented, in consultation with SHPO and ACHP, and will address the significant values contained by the site.	This measure was deleted. Such determination would be made in compliance with Section 106 consultation, in accordance with requirements of the National Historic Preservation Act.
• To ensure that undiscovered buried cultural resources are not inadvertently disturbed during the initial landfill construction phase or during subsequent development of landfill cells, qualified cultural resource monitors will be present during grading and excavation activities. Monitors will have the authority to temporarily halt or redirect construction in the event undisturbed buried cultural resources are uncovered, until such time as those resources are evaluated and salvaged, if necessary, in consultation with BLM.	Condensed and included as Measure C-3.
• Section 106 consultation for cultural resources at Bolo Station will be completed prior to issuance of the Final EIR/EIS. The regulatory requirements of 36 CFR Part 800, the ACHP *Procedures for Protection of Historic Properties*, will be completed by BLM in consultation with SHPO and ACHP, as necessary, to satisfy the requirements of NHPA, NEPA, and FLPMA. Consultation will address: - Determination of resource significance, as determined by a site's potential to meet requirements for NRHP listing.	This measure was deleted from the Mitigation Monitoring Program. Section 106 consultation has been completed (see Appendix C of the Supplement).

---

(1) See Table S.2 for a listing of the mitigation measures included in this Final EIR/EIS. The numbered mitigation measures (i.e., G-4) correspond to the numbering used in Table S.2.

TABLE 1.1

MITIGATION MEASURES REVISED OR DELETED SINCE THE DRAFT EIR/EIS

(Continued)

REVISED OR DELETED MITIGATION MEASURE	EXPLANATION
CULTURAL RESOURCES - Determination and documentation of potential of the proposed action to result in effects or adverse effects to significant cultural resources (including effects related to the transfer of cultural resources out of federal stewardship). The full inventory of onsite cultural resources will be addressed in the documentation related to determination of project effects, but potential adverse effects are limited to significant resources. - Preparation and implementation of a treatment plan, as needed, designed to offset potential adverse effects to eligible historic properties. This plan would address the significant values contained by the site(s), and could include the following elements: • Research design and statement of research goals. • Field work, including excavation and surface collection. • Document and archival research. • Technical report preparation and dissemination. • Curation of data and reports into an established repository with retrievable storage.	
• In accordance with CEQ implementing regulations, findings of the completed Section 106 process will be provided in the Final EIR/EIS. The findings will include a listing of onsite cultural resources determined eligible for NRHP listing, a review of potential adverse effects upon eligible properties that could result from the proposed action, and a synopsis of proposed treatment, as necessary, to mitigate anticipated adverse effects of the proposed action.	This measure has been deleted from the Mitigation Monitoring Program. The Section 106 consultation process has been completed (see Appendix C of the Supplement).
PALEONTOLOGICAL RESOURCES	
• **Resource Evaluation Phase:** This phase will evaluate known onsite resource localities and prioritize significant sites relative to focused research, scientific value, and potential for project effects. The availability of similar data elsewhere in the region will also contribute to the evaluation of significance. Evaluations are expected to be made from the previously accomplished literature review, field inventory, and collected specimens (San Bernardino County Museum, 1991). Resource evaluation is expected to be an ongoing process for the proposed action as: - New localities requiring evaluation are expected to be uncovered during project construction and operations phases. - Data have the potential to become redundant (collection of redundant data will be avoided). - Research goals may be satisfied or the nature of the data may require development of other appropriate research objectives.	This measure was condensed to reflect the actual requirement (see Measure P-1).
• **Field Salvage Phase:** This phase will consist of preexcavation salvage and excavation monitoring: - Preexcavation salvage will involve intense inspection and removal of fossil resources at the most significant localities identified during the resource evaluation phase. Prior to excavation, salvage of significant fossils is the first step toward clearing resources from parcels, with the second step being excavation monitoring. - Excavation monitoring will be conducted full- or part-time in areas identified as likely to contain significant paleontological resources, depending on the intensity of the excavation. Excavation for site facilities and landfill cell development has a high potential for impacts to significant paleontological resources where fossiliferous sediments are exposed on or near the surface. Monitoring will be carried out by a qualified paleontological monitor. The monitor will be equipped to: • Salvage significant fossils as they are unearthed so that excavation and construction delays area avoided. • Remove samples of sediments that are likely to contain remains of small fossil vertebrates. Salvage of small fossils through removal of standardized sediment samples to stockpile areas away from the active working area will be employed. Monitoring will be part-time (50 percent) at the commencement of excavation activities in potentially significant localities, in order to allow characterization of the fossil assemblage and evaluate significance. Equipment operators and site personnel will be instructed regarding correct protocol during monitoring and during discovery situations when a monitor is not present. In the latter event, the	This measure was condensed to reflect the actual requirement (see Measure P-2). Procedures shall be implemented through the Mitigation Monitoring Program.

---

(1) See Table S.2 for a listing of the mitigation measures included in this Final EIR/EIS. The numbered mitigation measures (i.e., G-4) correspond to the numbering used in Table S.2.

TABLE 1.1

MITIGATION MEASURES REVISED OR DELETED SINCE THE DRAFT EIR/EIS

(Continued)

REVISED OR DELETED MITIGATION MEASURE	EXPLANATION
PALEONTOLOGICAL RESOURCES (Continued)	
monitor will be contacted immediately to recover exposed fossils and mitigate adverse impacts to the resource. Should an unusually dense, extensive, or well preserved concentration of fossils be encountered during monitoring activities, monitoring will be increased to full-time. Upon prudent and timely collection of sufficient data to address measure objectives, construction would continue.	
• **Compliance Phase**: This phase is designed to identify, curate, and permanently house recovered fossils, and to produce a report that indicates to the lead agency that the paleontological resource impact mitigation program has been completed. During this phase: - Recovered specimens will be prepared to the point of identification, including washing of sediments to recover small vertebrates. - Identified specimens will be curated into an established museum repository with retrievable storage. - A report of findings with an appended itemized inventory of specimens will be prepared and submitted to the appropriate lead agency in accordance with an agreed upon submittal schedule.	This measure was condensed to reflect the actual requirement (see Measure P-3). Procedures shall be implemented through the Mitigation Monitoring Program.
• **Worker Education Program:** Employees will be briefed as to proper procedures when working with a paleontological monitor and when fossils are discovered in an unmonitored situation. Management will have adequate work-around plans for discovery situations so that excavation work can continue unimpeded away from a discovery site. Employees will additionally be briefed on the no collection policy for paleontological resources.	This measure was condensed to reflect the actual requirement (see Measure P-4). Procedures shall be implemented through the Mitigation Monitoring Program.
• **Public Information Program:** Information on the paleontology of the site and region will be included in an interpretive display at the visitor's center. In addition, signs that advise of the provisions of the Antiquities Act of 1906 and FLPMA will be posted at the visitor's center.	This measure has been deleted. As described in Measure P-3, recovered fossils shall be curated at the San Bernardino County Museum.
TRANSPORTATION	
• Maintenance and repairs, as necessary, to Kelbaker Road and Route 66 from Kelbaker Road to the Bolo Station Landfill entrance.	This measure is clarified as Measure T-2, to specify that the proportional share of maintenance and repairs would be required in the event that importation of clay requires the use of Kelbaker Road.
• Rail•Cycle shall continue working closely with the PUC to evaluate and coordinate grade crossing improvements.	The regulatory mechanism to initiate grade crossing improvements does not involve Rail•Cycle. Requests for new improvements are generally as a result of urban growth surrounding the railroad and are initiated by the respective jurisdictions. These requests are evaluated and prioritized by the PUC for recommended funding.
NOISE *No measures were deleted or revised*	–
LAND USE	
• The following mitigation measures will be required to address consistency with land use plans and policies for the County: - As the site of the proposed action is not addressed in the adopted CoSWMP, its approval would be based on compliance with AB 2296. If approved, the 1994 CoIWMP would reflect the selected site. - The County General Plan will be amended to reflect the proposed action. - The project will be subject to a CUP. - Construction activities will be subject to development requirements and review by the County Building and Safety Department. - Solid waste disposal activities will be monitored by the County Department of Environmental Health Services.	These measures were not included in this Final EIR/EIS because they are primarily administrative actions and not mitigation measures.

---

(1) See Table S.2 for a listing of the mitigation measures included in this Final EIR/EIS. The numbered mitigation measures (i.e., G-4) correspond to the numbering used in Table S.2.

TABLE 1.1

MITIGATION MEASURES REVISED OR DELETED SINCE THE DRAFT EIR/EIS

(Continued)

Page 8 of 8

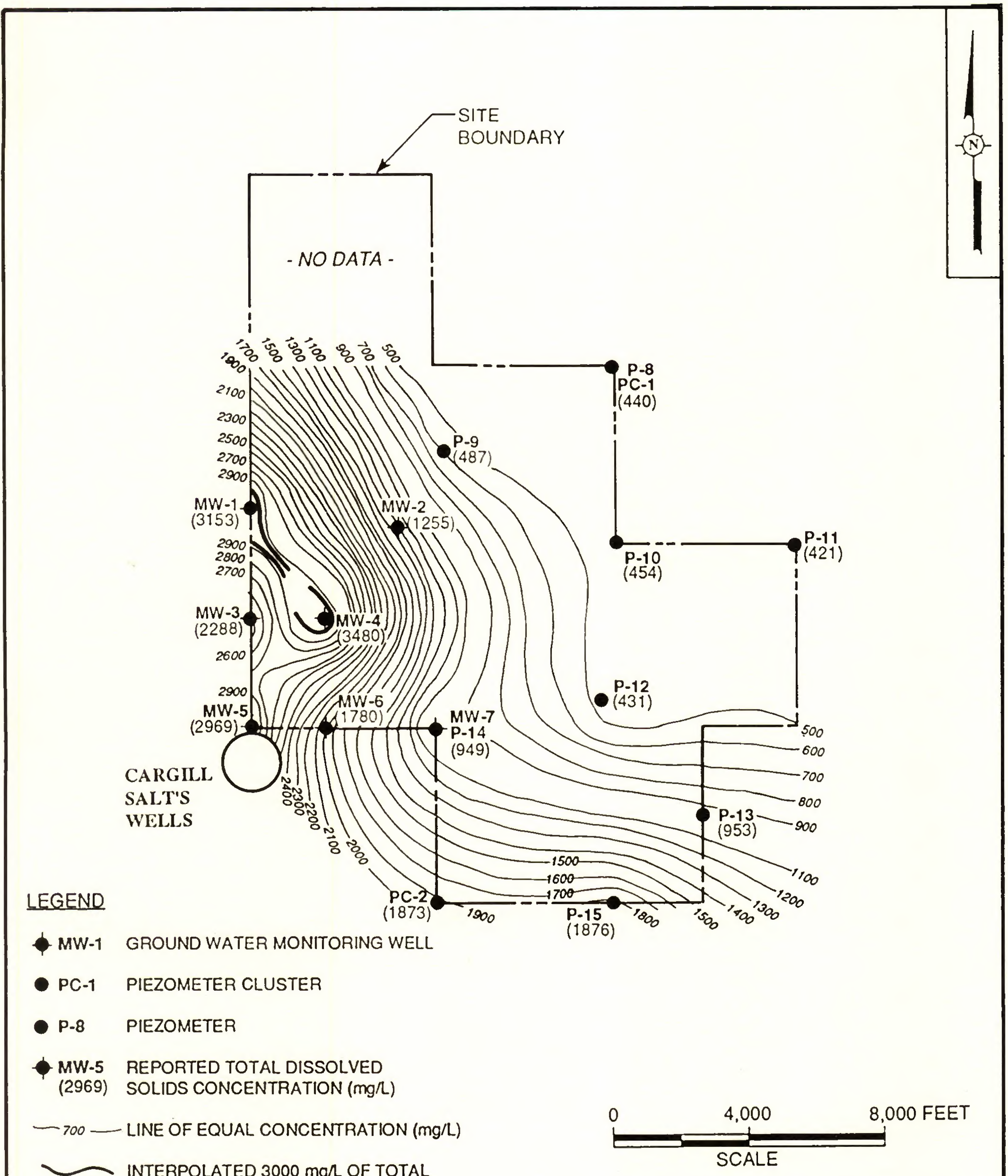
REVISED OR DELETED MITIGATION MEASURE	EXPLANATION
SOCIOECONOMICS	
• Rail-Cycle will hire from the local labor force to the extent possible, so that the requirements of 262 construction workers and 268 landfill and unit trains operations personnel would have a positive effect on local employment.	This measure was condensed to reflect the actual mitigation requirement (see Measure S-1).
• To the extent practicable, Rail•Cycle will retain the temporary construction personnel for permanent landfill employment positions. This would reduce population fluctuations within the affected communities, in addition to providing consistency in the transition from construction to landfilling operations.	This measure was condensed to reflect the actual mitigation requirement (see Measure S-2).
• Rail•Cycle will hire construction workers from the local labor force to the extent possible in order to minimize the effect that the temporary project construction requirements would have on local population fluctuations.	This measure was deleted. It is encompassed in the broader Measure S-1.
• Rail•Cycle will hire landfill and unit train operations personnel from the local labor force to the extent possible in order to minimize the effect of the proposed action on local population growth.	This measure was deleted. It is encompassed within the broader Measure S-1.
• To the extent practicable, Rail•Cycle will hire permanent operations personnel from the construction work force in order to minimize the number of workers and their families who move to the area.	This measure was deleted. It is essentially the same as Measure S-2.
• It will be a condition of construction and operations contracts that contractor personnel will live in approved housing only. This measure is intended to reduce to the maximum extent possible, the establishment of makeshift camps, temporary, or permanent camps.	This measure was deleted. Rail•Cycle does not plan to provide housing for personnel and it is not feasible to monitor residency of employees.
• A fire/paramedic station will be established in the vicinity of the project area and Rail•Cycle will contribute to a fund for its construction and for the funding of equipment and staff.	This measure is included as Public Health and Safety Measure PH-6 which clarifies that Rail•Cycle shall construct the fire station.
• In compliance with the County Fire Code, 180,000 gallons of water will be reserved for firefighting purposes.	This measure is included under Public Health and Safety (see Measure PH-5).
• A helipad will be constructed in Section 5, at the extreme northeastern site boundary, near the visitor's center. The helipad will be available for use in the event of medical emergencies. The helipad will be constructed in Section 5, at the extreme northeastern site boundary, near the visitor's center. The helipad will be available for use in the event of medical emergencies. The helipad will be illuminated by floodlights at times of emergency.	The helipad is considered part of the project design and not a Mitigation measure.
• Fire extinguishers will be located throughout the project site.	This measure is included under Public Health and Safety (see Measure PH-3).
• Fire hydrants and hoses will be located to service the facilities.	This measure is included under Public Health and Safety (see Measure PH-4).
• Stored materials will be identified as to their risk of fire, and adequate and proper containment shall be used.	This measure is included under Public Health and Safety (see Measure PH-14).
• Water trucks and tankers utilized in the landfill operation will be available to support the dedicated fire engine, if needed.	This measure is included under Public Health and Safety (see Measure PH-7).
• Buildings and structures will be designed to meet fire prevention standards required by the County Fire Marshall.	This measure has been deleted from the mitigation program. It is a County requirement for building design to meet fire prevention standards prior to the issuance of building permits by the Department of Building and Safety.
• The impacts to schools will be mitigated through school districts constructing additional classroom space.	This measure has been clarified to indicate that mitigation will be achieved indirectly through school impact fees or a Mello Roos district to fund school facilities (see Measure S-4).

91-109 (7/11/94/rmm)

---

(1) See Table S.2 for a listing of the mitigation measures included in this Final EIR/EIS. The numbered mitigation measures (i.e., G-4) correspond to the numbering used in Table S.2.

91-109 SEIR/EIS REV. 4/4/94



LEGEND

- MW-1 GROUND WATER MONITORING WELL
- ● PC-1 PIEZOMETER CLUSTER
- ● P-8 PIEZOMETER
- MW-5 (2969) REPORTED TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)
- 700 LINE OF EQUAL CONCENTRATION (mg/L)
- INTERPOLATED 3000 mg/L OF TOTAL DISSOLVED SOLIDS CONTOUR

NOTES:

1. CONTOURS DEVELOPED BASED ON DATA COLLECTED DURING APRIL 1991 WHILE LESLIE SALT'S (CARGILL) BRINE PUMPS WERE PUMPING.
2. THIS DATA APPLIES TO THE UPPERMOST PORTION OF THE SATURATED ZONE. SUBSTANTIALLY HIGHER TDS CONCENTRATIONS OCCUR AT DEPTH IN THE SOUTHERN PORTIONS OF THE SITE.

SOURCE: JACOBS, 1991b.

FIGURE 4.2.2

TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN GROUND WATER

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

TABLE 4.7.6

AIR QUALITY MEASUREMENT SUMMARY(1)(2)
BOLO STATION SITE

POLLUTANT	1991										1992	
	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
NO_2 (ppm)												
• 1 hour	0.021	0.026	0.020	0.014	0.025	0.021	0.017	0.022	0.23	0.028	0.027	0.021
SO_2 (ppm)												
• 1 hour	0.002	0.004	0.004	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.004
• 3 hours	0.002	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.003
• 24 hours	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.002
PM_{10} ($\mu g/m^3$)												
• 24 hour	24.0	55.4	397.8	25.6	139.4	52.9	54.3	19.7	63.5	13.5	11.6	21.2
O_3 (ppm)												
• 1 hour	0.073	0.102	0.101	0.096	0.093	0.095	0.081	0.079	0.057	0.043	0.047	0.056

91-109 (6/8/94/ds)

(1) Environmental Monitoring Company, Inc., March 1991 to February 1992.
(2) Maximum reported values.

TABLE 6.1

PROJECTS IN CUMULATIVE IMPACT STUDY REGION

PROPOSED PROJECT(1)	STATUS(2)	POTENTIAL CUMULATIVE ENVIRONMENTAL ISSUES(3)
1. Fort Cady Mine	Environmental review completed.	3, 4, 5, 7, 8
2. Hector Mine Expansion	Approved by County and BLM in 1992.	3, 4, 5, 7, 8
3. Hidden Valley Residual Repository	Application on file with County - project currently under environmental review.	3, 4, 5, 6, 7, 8, 12, 13
4. Broadwell Basin Residual Repository	Environmental review completed - EIR Certified.	3, 4, 5, 6, 7, 8, 12
5. Parker Mine	U.S. Government is challenging the validity of the mineral rights.	3, 4, 5, 7, 8
6. Ward Valley Low-Level Radioactive Waste Facility	Final EIR certified and license issued September 1993. Litigation ongoing.	3, 4, 5, 6, 7, 8, 12
7. Cadiz Land Company, Inc.	Application on file with County - EIR Certified.	2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13
8. Desert Garnet Mine	Plan of operations submitted to BLM.	3, 4, 5, 7, 8, 10, 11, 13
9. Cargill Salt	Currently extracting and processing brines from Bristol Dry Lake.	2, 3, 4, 5, 7, 8, 10, 11, 12, 13
10. National Chloride	Currently extracting and processing brines from Bristol Dry Lake.	2, 3, 4, 5, 7, 8, 10, 11, 12, 13
11. Eagle Mountain Landfill	Final EIS/EIR Certified by Riverside County in October 1992.	3, 4, 5, 7, 8, 12

91-109 (7/11/94/pm)

(1) See Figure 6.1 of the Supplement for location of proposed projects.

(2) Information on the status of proposed projects was provided by the County and BLM.

(3) Issues:

1	Geology or Soils
2	Water
3	Vegetation
4	Wildlife
5	Air
6	Health/Safety
7	Visual Resources
8	Cultural/Paleontological Resources
9	Land Use
10	Socioeconomics
11	Noise
12	Mineral Resources
13	Transportation

TABLE G.4

REPTILES KNOWN AND EXPECTED IN THE VICINITY OF THE BOLO STATION SITE(1)

SCIENTIFIC NAME	COMMON NAME	OBSERVED DURING SURVEY	EXPECTED BUT NOT OBSERVED
Boidae			
Lichanura trivirgata	Rosy boa	–	X
Colubridae			
Arizona elegans	Glossy snake	–	X
Chionactis occipitalis	Western shovel-nosed snake	X	–
Hypsiglena torquata	Night snake	–	X
Masticophis flagellum	Coachwhip	–	X
Phyllorhynchus decurtatus	Spotted leaf-nosed snake	–	X
Pituophis melanoleucus	Gopher snake	–	X
Rhinocheilus lecontei	Long-nosed snake	–	X
Salvadora hexalepis	Western patch-nosed snake	X	–
Gekkonidae			
Coleonyx variegatus	Banded gecko	–	X
Iguanidae			
Callisaurus draconoides	Zebra-tailed lizard	X	–
Crotophytus insularis	Desert collared lizard	–	X
Dipsosaurus dorsalis	Desert iguana	X	–
Gambelia wizlizenii	Leopard lizard	X	–
Phrynosoma platyrhinos	Desert horned lizard	X	–
Sauromalus obesus	Chuckwalla	–	X
Sceloporus magister	Desert spiny lizard	–	X
Uma scoparia	Mojave fringe-toed lizard	X	–
Urosaurus graciosus	Long-tailed brush lizard	–	X
Uta stansburiana	Side-blotched lizard	X	–
Telidae			
Cnemidophotus tigris	Western whiptail	–	X
Viperidae			
Crotalus cerastes	Sidewinder	X	–
Crotalus scutulatus	Mojave rattlesnake	–	X
Gopherus aggassizi	Desert tortoise	X	–

91-109 (7/11/94/pm)

(1) Ecological Research Services, 1990; 1991; 1992d; 1992e.

TABLE G.5

BIRDS KNOWN AND EXPECTED IN THE VICINITY OF THE BOLO STATION SITE(1)

Page 1 of 2

SCIENTIFIC NAME	COMMON NAME	RESIDENCY PERIOD(2)	OBSERVED DURING SURVEY	EXPECTED BUT NOT OBSERVED
Accipitridae	**Hawks and Eagles**			
Aguila chrysaetos	Golden eagle	R	(4)	–
Buteo jamaicensis	Red-tailed hawk	R	(3)(4)(5)	–
Circus cyaneus	Northern harrier	W	(5)	–
Alaudidae	**Larks**			
Eremophila alpestris	Horned lark	W	(3)	–
Caprimulgidae	**Nightjars**			
Chordeiles acutipennis	Lesser nighthawk	S	(3)	–
Phalaenoptilus nuttallii	Common poorwill	S	–	X
Cathartidae	**Vultures**			
Cathartes aura	Turkey vulture	M	(3)(4)	–
Columbidae	**Pigeons**			
Columba livia	Rock dove	R	(4)	–
Zenaida macroura	Mourning dove	R	(3)(4)	–
Corvidae	**Jays, Crows, and Allies**			
Corvus corax	Common raven	R	(3)(4)(5)	–
Cuculidae	**Cuckoos**			
Geococcyx californianus	Greater roadrunner	R	(3)	–
Emberizidae	**Warblers, Sparrows, and others**			
Amphispiza belli	Sage sparrow	R	(4)	–
Amphispiza bilineata	Black-throated sparrow	R	(4)(5)	–
Dendroica coronata	Yellow-rumped warbler	W	(3)(4)(5)	–
Dendroica petechia	Yellow warble	M	(3)	–
Euphagus cyanocephalus	Brewer's blackbird	W	(3)(4)	–
Icterus galbula	Northern oriole	A	(4)(5)	–
Spizella breweri	Brewer's sparrow	M	(3)(5)	–
Spizella passerina	Chipping sparrow	W	(3)(5)	–
Wilsonia pusilla	Wilson's warble	M	(3)(5)	–
Zonotrichia leucophrys	White-crowned sparrow	W	(5)	–
Falconidae	**Falcons**			
Falco mexicanus	Prairie falcon	R	(3)(4)	–
Falco sparverius	American kestrel	R	(3)(4)(5)	–
Fringillidae	**Finches**			
Carpodacus mexicanus	House finch	R	(3)(5)	–
Hirundinidae	**Swallows**			
Tachycineta thalassina	Violet-green swallow	M	(5)	–
Hirundo pyrrhonota	Cliff swallow	M	(5)	–
Hirundo rustica	Barn swallow	M	(5)	–

(1) Ecological Research Services, 1990; 1991.

(2) M = Migrant; R = Permanent Resident; S = Summer Resident; W = Winter Resident.

(3) Observed during spring 1990 survey.

(4) Observed during winter 1991 surveys (January and February).

(5) Observed during spring 1991 survey (April).

TABLE G.5

BIRDS KNOWN AND EXPECTED IN THE VICINITY OF THE BOLO STATION SITE(1) (Continued)

Page 2 of 2

SCIENTIFIC NAME	COMMON NAME	RESIDENCY PERIOD(2)	OBSERVED DURING SURVEY	EXPECTED BUT NOT OBSERVED
Laniidae	**Shrikes**			
Lanius ludovicianus	Loggerhead shrike	R	(3)(4)	–
Mimidae	**Mimic Thrushes**			
Mimus polyglottos	Northern mockingbird	R	(3)	–
Oreoscoptes montanus	Sage thrasher	M	(5)	–
Toxostoma lecontei	Le Conte's thrasher	R	(3)(4)	–
Motacillidae	**Larks**			
Eremophila alpestris	Horned lark	W	(4)(5)	–
Muscicapidae	**Kinglets and Thrushes**			
Polioptila melanura	Black-tailed gnatcatcher	R	(3)(5)	–
Regulus calendula	Ruby-crowned kinglet	R	(4)	–
Paridae	**Titmice**			
Auriparus flaviceps	Verdin	R	(3)(4)	–
Passeridae	**Weavers**			
Passer domesticus	House sparrow	R	(4)	–
Picidae	**Woodpeckers**			
Colaptes auratus	Northern flicker	R	(4)	–
Ptilogonatidae	**Flycatchers**			
Phainopepla nitens	Phainopepla	S	(3)	–
Strigidae	**Owls**			
Asio otus	Long-eared owl	W	(4)	–
Bubo virginianus	Great horned owl	R	--	X
Sturnidae	**Starlings**			
Sturnus vulgaris	European starling	R	(4)	–
Trochilidae	**Hummingbirds**			
Calypte costae	Costa's hummingbird	S	–	X
Troglodytidae	**Wrens**			
Salpinctes obsoletus	Rock wren	R	(3)	–
Thryomanes bewickii	Bewick's wren	R	(3)	–
Tyrannidae	**Tyrant Flycatchers**			
Empidonax sp.	Empid flycatcher	M	(3)(5)	–
Empidonax wrightii	Gray flycatcher	M	(3)(5)	–
Myiarchus cinerascens	Ash-throated flycatcher	S	(3)	–
Sayornis saya	Say's phoebe	R	(4)	–
Tyrannis verticalis	Western flycatcher	M	(5)	–

91-109 (7/11/94/pm)

(1) Ecological Research Services, 1990; 1991.
(2) M = Migrant; R = Permanent Resident; S = Summer Resident; W = Winter Resident.
(3) Observed during spring 1990 survey.
(4) Observed during winter 1991 surveys (January and February).
(5) Observed during spring 1991 survey (April).

TABLE G.6

MAMMALS KNOWN AND EXPECTED IN THE VICINITY OF THE BOLO STATION SITE(1)

SCIENTIFIC NAME	COMMON NAME	OBSERVED DURING SURVEY	EXPECTED BUT NOT OBSERVED
Canidae			
Canis latrans	Coyote	–	X
Vulpes macrotis macrotis	Kit fox	–	X
Cricetidae			
Neotoma lepida	Cactus mouse	X	–
Onychomys torridus	Deer mouse	X	–
Peromyscus eremicus	Desert woodrat	X	–
Peromyscus maniculatus	South grasshopper mouse	X	–
Equidae			
Equus asinus	Burro	X	–
Feilidae			
Felis rufus	Bobcat	X	–
Heteromyidae			
Dipodomys deserti	Desert kangaroo rat	–	X
Dipodomys merriami	Merriam's kangaroo rat	–	X
Perognathus longimembris	Little pocket mouse	X	–
Perognathus penicillatus	Desert pocket mouse	X	–
Perognathus formosus	Longtail pocket mouse	X	–
Leporidae			
Lepus californicus	Black-tailed jackrabbit	–	X
Sylvilagus auduboni	Audubon's cottontail	X	–
Molossidae			
Tadarida brasiliensis	Mexican freetail bat	X	–
Sciuridae			
Ammospermophilus leucurus	Antelope ground squirrel	X	–
Spermophilus tereticaudus	Round-tailed ground squirrel	–	X
Vespertilionidae			
Antrozous pallidus	California myotis	X	–
Eptesicus fuscus	Western pipistrel	–	X
Lasiurus cinereus	Big brown bat	X	–
Myotis californicus	Hoary bat	X	–
Pipistrellus hesperus	Pallid bat	X	–
Ovis canadensis nelsoni	Nelson's bighorn sheep	X	–

91-109 (7/11/94/pm)

---

(1) Ecological Research Services, 1990; 1991; 1992d; 1992e.

CHAPTER 2.0
SPECIFIC RESPONSES TO COMMENTS ON THE DRAFT EIR/EIS

2.0 SPECIFIC RESPONSES TO COMMENTS ON THE DRAFT EIR/EIS

1. This chapter provides specific responses to public and agency comments on the Draft EIR/EIS. Approximately 500 copies of the Draft EIR/EIS were distributed to agencies, organizations, and the public. The County and BLM received 92 letters that provided comments on the Draft EIR/EIS. Additional comments were received during three public hearings held by the BLM in accordance with NEPA.

2. Included in this chapter are copies of each comment letter and the transcripts from the three BLM public hearings. Each comment letter and transcript has been assigned a three digit document control number. See Table 2.1 for a listing of the comment letters received and the corresponding document control numbers. The comment letters have been organized by federal agencies, state/regional agencies, county/local agencies, businesses/organizations, individuals, and petitions/public hearing transcripts.

3. Specific comments in each letter have been assigned a sequential comment number. Specific responses to each comment are annotated by the three digit document control number and the assigned comment number (e.g., 001-1).

4. Sections 2.1 through 2.6 include the comment letters and transcripts, and the specific responses to each comment. Responses to a specific comments may be found immediately following the comment letter.

5. Many of the comments raised essentially identical issues or concerns. To provide consistency and aid in the review of this Final EIR/EIS, standard responses were developed and incorporated, as appropriate, in responding to recurring comments.

TABLE 2.1

LIST OF COMMENTERS ON THE DRAFT EIR/EIS

Page 1 of 4

DOCUMENT NUMBER	COMMENTER
FEDERAL AGENCIES (See Section 2.1)	
001	U.S. Bureau of Reclamation
002	U.S. Department of Health and Human Services Center for Disease Control
003	U.S. Environmental Protection Agency
STATE/REGIONAL AGENCIES (See Section 2.2)	
004	California Public Utilities Commission
005	California Department of Fish and Game
006	Resources Agency of California Department of Conservation
007	Governor's Office of Planning and Research
008	State Lands Commission - January 12, 1993
009	State Lands Commission - January 19, 1993
010	California Regional Water Quality Control Board Colorado River Basin District
011	California Integrated Waste Management Board
012	California Air Resources Board
COUNTY/LOCAL AGENCIES (See Section 2.3)	
013	San Bernardino County Land Development Department Interoffice Memo - Richard D. Thompson
014	City of Chino Hills
015	San Bernardino County Solid Waste Management Department Interoffice Memo - Carrie Hyke
016	City of Ontario
017	City of Fontana
018	Newberry Community Services District
019	Newberry Springs Fire Department
020	San Bernardino County Air Pollution Control District
021	Town of Apple Valley - February 19, 1993 (Mojave Desert and Mountain Solid Waste Joint Powers Authority)
022	Town of Apple Valley
023	Town of Apple Valley
024	Town of Apple Valley

TABLE 2.1

LIST OF COMMENTERS ON THE DRAFT EIR/EIS (Continued)

Page 2 of 4

DOCUMENT NUMBER	COMMENTER
COUNTY/LOCAL AGENCIES (Continued)	
025	SCAG Planning Directors Committee
026	City of Victorville
027	City of Hesperia
028	Mojave Water Agency
029	City of Rancho Cucamonga
030	San Bernardino County Department of Environmental Health Services
031	Southern California Regional Rail Authority
032	City of Twentynine Palms
033	San Bernardino County Interoffice Memorandum Water Resources Division
BUSINESSES/ORGANIZATIONS (See Section 2.4)	
034	Eagle Mountain Landfill and Recycling Center
035	Cadiz Land Company, Inc.
036	George P. Rice, Cadiz Land Company, Inc. Submitted at BLM Public Hearing February 8, 1993
037	Louis E. Gonzalez, Cadiz Land Company, Inc. Submitted at BLM Public Hearing February 11, 1993
038	Ted W. Dutton, Cadiz Land Company, Inc. Submitted at BLM Public Hearing February 11, 1993
039	Cargill Salt Division
040	California Communities Against Toxics
041	California Communities Against Toxics
042	Desert Citizens Against Pollution - Joe Blackburn
043	The California Native Plant Society
044	The Desert Protective Council, Inc. - Douglas Allen
045	Sierra Club - San Gorgonio Chapter, Peter Burk
046	Sierra Club - San Gorgonio Chapter, Louise French

TABLE 2.1

LIST OF COMMENTERS ON THE DRAFT EIR/EIS (Continued)

Page 3 of 4

DOCUMENT NUMBER	COMMENTER
INDIVIDUALS (See Section 2.5)	
047	Louis A. Conter
048	Joan C. Welch
049	William M. Raisner
050	Judith A. Pruitt
051	Ray Kirkham - February 1, 1993
052	Ray Kirkham
053	Judith A. Pruitt
054	Connie Sachs
055	Jean M. LaRose
056	Vera Ciborowski
057	John and May Lohe
058	Ellen B. Kindsvater
059	Rebecca M. Turner
060	Lynnette M. Shmakoff
061	Orville and Louise Browy
062	Phyllis Crawford
063	Helene Schpak
064	Charles W. & Donna L. Fox
065	Charles W. & Donna L. Fox
066	Karen Felker
067	David E. Sabol
068	Bernard Steppe, Jr.
069	Christine Carraher
070	Mr. and Mrs. H. R. Toenjes; Dollie Irwin & John Cornwall
071	George W. Robinson
072	George Goemans
073	Allen Arata
074	D. J. Masker
075	No Comments Assigned to this Number
076	Della Ann Knaggs

TABLE 2.1

LIST OF COMMENTERS ON THE DRAFT EIR/EIS (Continued)

Page 4 of 4

DOCUMENT NUMBER	COMMENTER
INDIVIDUALS (Continued)	
077	Della Ann Knaggs
078	Esther L. Herbert
079	Sylvester L. Brooks
080	Iva E. Feldman
081	Patricia Chapman
PETITIONS/PUBLIC HEARING TRANSCRIPTS (See Section 2.6)	
082	Petitions - Committee for Protection of Rural Independence
083 to 089	Petitions - Desert Resident and Property Owner Petition
090 to 091	Concerned Citizens' Petition
092	Eric M. Ducat - Petition
093	BLM Public Hearing Transcript - February 8, 1993, Barstow, California
094	BLM Public Hearing Transcript - February 10, 1993, Twentynine Palms, California
095	BLM Public Hearing Transcript - February 11, 1993, San Bernardino, California

91-109 (7/11/94/pm)

SECTION 2.1

FEDERAL AGENCIES COMMENTS AND RESPONSES

001

United States Department of the Interior

TAKE PRIDE IN AMERICA

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470

IN REPLY REFER TO:

LC-159
ENV-6.00

DEC 17 1992

Mr. Randy Scott
Planning Department
County of San Bernardino
385 N. Arrowhead Avenue, 3rd Floor
San Bernardino CA 92415-0180

Subject: Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) on the Rail-Cycle Bolo Station Landfill

Dear Mr. Scott:

The Bureau of Reclamation has reviewed the subject document and has no comments to offer. The proposed action will have no impact upon any of our facilities. ①

Thank you for the opportunity to comment on the document.

Sincerely,

Michael L. Walker

William E. Rinne
Regional Environmental Officer

DOCUMENT 001
U.S. BUREAU OF RECLAMATION
RESPONSE TO COMMENTS

Response 001-1

1. The comment noted that the proposed action will have no impact on facilities of the Bureau of Reclamation, therefore, no response is required.

002

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
Atlanta GA 30333

January 28, 1993

FEB 1993
RECEIVED

Mr. Randy Scott, Senior Planner
County of San Bernardino, Planning Department
385 N. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182

Dear Mr. Scott:

We have completed our review of the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS) for the Rail·Cycle-Bolo Station Landfill. We are responding on behalf of the U.S. Public Health Service.

The DEIR/DEIS is well written and provides thorough discussion of the environmental considerations associated with this project. As noted in this document, there will be environmental impacts of some significance associated with the implementation of this waste hauling and disposal activity. However, if the mitigation measures are carried out as described, we agree that there should not be any significant adverse impacts to public health or safety.

We were pleased to see considerable attention given in section 5 of the report to minimizing potential impacts to the groundwater underlying the preferred disposal site. To protect the groundwater, there is mention of maintaining a 5 foot minimum distance between the bottom of the landfill and the anticipated maximum elevation of the local water table. We are interested in how the maximum elevation of the water table is determined. For example, is an unusually heavy annual or seasonal recharge from the nearby mountains considered? ①

We noted that an increase in the raven population is thought to be possible. We did not see any air strips near the preferred site. Is this correct? Birds roosting on or near landfills could be a safety hazard to planes landing or taking off near such a facility. ②

In section 5.8.1.1.2 there is discussion that daily soil cover between waste cells is a mitigating measure to limit the spread of subsurface fires. On page 3-31 there is discussion that synthetic materials may be used as an alternative to soil for daily cover. Would synthetic materials, if used, provide comparable fire containment capability to the compacted daily soil cover? ③

002

Section 5.8.1.1.4 discusses the response to finding hazardous wastes at the MRFs prior to the waste being hauled to Bolo Station. Although the prescreening of the waste at the MRFs should prove effective in limiting hazardous waste at Bolo Station, it is likely that hazardous waste will be discovered at Bolo Station at some point in its extensive operating life. Are there any contingency plans for such situations? Do the local emergency responders have "hazmat" capabilities? ④

We appreciate the opportunity to review and comment on this draft document. Please ensure that we are included on your mailing list to receive a copy of the Final EIR/EIS, and future Draft EA's and Environmental Impact Statements which may indicate potential public health impacts and are developed under the National Environmental Policy Act (NEPA).

Sincerely yours,

Kenneth W. Holt

Kenneth W. Holt, M.S.E.H.
Special Programs Group (F29)
National Center for Environmental
Health

CC: Mr. Harvey Rogers

DOCUMENT 002
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL
RESPONSE TO COMMENTS

Response 002-1

1. The maximum elevation of the ground water table used for purposes of designing the landfill allows for a uniform 9 feet of capillary rise across the site, a conservative allowance of 0.5 feet for rise due to the 100-year, 24-hour storm event, and an estimated rise in the ground water elevation for potential cessation of pumping by Cargill. Additional detail regarding the methodology and design to assure the minimum 5-foot separation between the wastes and ground water table was provided in Section 5.2.1.2.2 of the Supplement.

Response 002-2

1. No commercial airports or general aviation airfields are located in the vicinity of the proposed Bolo Station site. Two non-permitted, small, private dirt airstrips are located in the general area. One is located at Amboy approximately 6.5 miles west of the site and the other is located approximately 6 miles east of the site on landed owned by Cadiz Land Company (CLC). Both airstrips are limited to light aircraft. The airstrip at Amboy is infrequently used. The CLC airstrip is used on an occasional basis to support agricultural operations. Given the distance of these airstrips from the proposed landfill and the type of aircraft and limited frequency of use, the proposed action is not expected to have any effect (i.e., creation of a bird hazard) at these airstrips.

2. The control of ravens and other bird species was discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations would be employed (i.e., compaction of waste at the working face, periodic application of cover material during the day, maintaining a small working face, and an active litter control program) that are expected to be effective in limiting the attractiveness of the site to ravens and other birds. In the event ravens or other bird species are attracted to the site, various measures would be implemented on an as-needed basis to prevent bird populations from becoming established at the landfill. Section 5.6.5 of the Draft EIR/EIS included specific mitigation measures that would be implemented if ravens or other birds are found to be attracted to the site. These measures included, but are not necessarily limited to, the use of an overhead nylon line grid system (bird wires), distress tapes, propane cannons, and racket bombs. The effectiveness of these measures would be monitored and, if found not to be completely effective, additional measures would be developed by Rail•Cycle in consultation with the BLM, U.S. Fish and Wildlife Services (USFWS), and California Department of Fish and Game (CDFG).

3. In addition, Rail•Cycle, in consultation with BLM and USFWS, conducted a baseline raven study that included an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys documented raven (as well as other bird species) populations and usage patterns in the study area. Baseline data will be compared to data collected during the operation of the proposed landfill. If comparison of data finds that ravens are being attracted to the site or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented at the landfill in consultation with BLM, USFWS, and CDFG.

Response 002-3

1. Federal (40 CFR, Part 258 Subtitle D) and California (CCR Title 14, Division 7) regulations that govern the operation of landfills require that a cover of not less than 6 inches of compacted soil be placed at the end of each operating day over all surfaces that received solid waste during that day. Daily cover is required to control vectors, fires, odors, and other nuisances. These regulations allow the use of alternative materials (i.e., synthetic materials) to meet daily cover requirements, if the landfill operator can demonstrate that the selected alternative meets specific performance standards for the control of vectors, fires, odors, and other nuisances.

2. As stated in Section 3.3.2.1.3 of the Draft EIR/EIS, Rail•Cycle would apply a minimum 6-inch thick layer of compacted soil or an alternative daily cover material approved and permitted for use at the site. By regulation, an alternative cover material must meet the performance standards for control of vectors, fires, odors, and other nuisance as outlined in California Code of Regulations (CCR) Title 14, Division 7. Therefore, for an alternative cover material to be approved and permitted for use at the proposed landfill, the alternative must provide comparable fire containment capability as a 6-inch thick layer of compacted soil.

3. A 6-inch layer of compacted soil would be applied as daily cover on the top of the working face. Based on ongoing refinement of anticipated operations at the proposed landfill, Rail•Cycle plans to request approval from CIWMB, the Local Enforcement Agency (LEA), and RWQCB for use of an alternative daily cover material on the side-slopes of the working face. An alternative material being considered by Rail•Cycle for use on the side-slopes of the working face is a reusable geotextile blanket. For purposes of the EIR/EIS, the use of a 6-inch layer of compacted soil or an approved equivalent alternative material is considered as baseline for the proposed action.

Response 002-4

1. As discussed in Section 5.8.1.1.4 of the Draft EIR/EIS, a comprehensive hazardous material/waste load checking program would be implemented as part of the Rail•Cycle project. The Draft EIR/EIS did not include specific details regarding load checking, therefore, additional information is provided below to respond to this comment.

2. Prior to each waste load arriving at the working face of the landfill, the following four separate checks for hazardous material/waste would occur:

   - Each hauler transporting waste to the MRFs or other processing facilities would be responsible for inspecting the waste for hazardous or suspicious waste. Waste haulers utilizing a specific MRF or other processing facilities, would have a contract or business agreement with the facility specifying their responsibility for waste inspection. Waste from unknown waste haulers would not be accepted without a thorough inspection of the load.

   - Each load entering the MRFs or other processing facilities would be visually inspected for hazardous or suspicious waste when the load is emptied on the tipping floor. Personnel at the facility would receive training in the identification and handling of hazardous or suspicious waste. Hazardous waste identified would be removed from the waste stream and temporarily stored (i.e., less than 90 days) in an appropriate area of the facility. Periodically, these wastes would be transported by a licensed transporter to an approved disposal facility or other approved hazardous waste treatment facility.

   - Waste passing through the recyclable materials sorting lines at the MRFs or processing system at other facilities would undergo an additional visual inspection as part of the sorting process. Hazardous waste identified through this process would be handled and managed as described above.

   - Each load arriving at the working face of the landfill would be visually inspected by landfill personnel trained to identify and handle hazardous or suspicious waste. Hazardous waste identified through this inspection would be taken to the temporary (i.e., less than 90 days) hazardous waste storage facility at the landfill. This facility was described in Section 3.3.2.4 of the Draft EIR/EIS. Periodically, the wastes would be transported by a licensed transporter to an approved disposal facility or other approved hazardous waste treatment facility.

3. In addition to the process described above, a random load check program would be implemented at each MRF or other processing facilities, and the landfill in accordance with Subtitle D and CCR Title 14. Selected loads would be tipped at a designated area at the facility or landfill and thoroughly inspected. The number of loads randomly selected would be established as part of the permitting process for each MRF or processing facility, and the landfill by the CIWMB and responsible LEA.

4. As stated in Section 5.8.1.1.4 of the Draft EIR/EIS, to assure that waste transported to the proposed landfill has undergone a load checking program, Rail•Cycle would not accept waste from MRFs or other processing facilities not operated by WMNA unless the operator provides evidence of an equivalent load checking program. For waste from a facility to be accepted for transport to the proposed landfill, the facility must have a valid permits issued by the responsible LEA and CIWMB, and demonstrate its compliance with applicable conditions of the permit.

5. Hazardous and other special wastes defined by CCR Title 22 would not be accepted at the proposed landfill. However, small quantities of hazardous waste, primarily household hazardous waste, may inadvertently enter the waste stream. The load checking program described above is expected to limit the volume of hazardous waste and household hazardous waste reaching the working face to less than 0.5 to 1 percent of the total volume; however, small amounts of these waste are still expected to reach the working face.

6. In recognition that small amounts of hazardous waste (primarily household hazardous waste) would reach the working face, landfill personnel would receive hazardous material/waste identification, handling and disposal training (see Section 5.8.1.4 of the Draft EIR/EIS). The Draft EIR/EIS did not include specific details regarding this training, therefore, additional information is provided below to respond to this comment.

7. Rail•Cycle would provide training in the identification and handling of hazardous or suspicious waste to landfill personnel. Site safety engineers and selected landfill personnel would receive specific hazardous materials (HAZMAT) training for handling and disposing of hazardous material/waste. Personnel with HAZMAT training would be onsite during landfill operating hours. In addition, key site safety engineers would be on 24-hour call to respond to a HAZMAT incident. Appropriate emergency response and contingency plans and a spill prevention control plan would be prepared for the landfill in accordance with applicable federal and state regulations.

8. In addition to HAZMAT training for specific landfill personnel, Rail•Cycle will construct a new County fire station at the entrance to the landfill (see Section 3.2.5 of the Supplement). County personnel assigned to this station would have HAZMAT training. This new County fire station would augment the existing County-wide emergency response capabilities as well as the County's HAZMAT response system.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

February 26, 1993

RECEIVED
MAR 1993
BY

Mr. Doug Romoli
Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, CA 92507-0714

Dear Mr. Romoli:

The U.S. Environmental Protection Agency has reviewed the **Draft Environmental Impact Statement (DEIS) for the Rail·Cycle-Bolo Station Landfill, San Bernardino County, California.** Our comments on this DEIS are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementation Regulations, and EPA's authorities under §309 of the Clean Air Act.

The DEIS evaluates alternatives for construction and operation of a municipal solid waste landfill in San Bernardino County. The landfill at Bolo Station would be located on 4,800 acres of land, 1,600 acres of which is currently federal land managed by the Bureau of Land Management (BLM). The proposed action would include exchange of 1,600 acres of federal land for 1,920 acres of privately owned land, amendment of the California Desert Conservation Area Plan, and granting of right-of-ways. Up to 21,000 tons of municipal solid waste would be transported by rail each day from various southern California cities to the 2,100-acre landfill over a period of up to 100 years. Alternatives to the proposed action include the Cadiz Valley Alternative, the Reduced Action Alternative, and the No Action Alternative.

We have rated this DEIS as EO-2 -- Environmental Objections-Insufficient Information (see enclosed "Summary of Rating Definitions and Follow-Up Actions"). Our rating reflects our objections to the project's potential impacts to air and water quality and the need for additional information in the Final Environmental Impact Statement (FEIS) regarding air quality impacts, groundwater monitoring, design and management of the leachate collection system and landfill cover, and the biological opinion for the desert tortoise. ①

We appreciate the opportunity to review this DEIS. Please send a copy of the FEIS to this office at the same time it is officially filed with our Washington, D.C., office. If you have any questions, please call me at (415) 744-1015 or Jeanne Dunn Geselbracht, Office of Federal Activities, at (415) 744-1576.

Printed on Recycled Paper

Sincerely,

Jacqueline Wyland
Deanna M. Wieman, Director
Office of External Affairs

Enclosures

001165/92-432

cc: Randy Scott, San Bernardino County Planning Department
Robert Perdue, California RWQCB, Region 7
San Bernardino County Air Pollution Control District
Bernie Vlach, California Integrated Waste Management Board

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommend for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1-Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

Air Quality

1. The Bolo Station site is currently within federally designated attainment areas for all priority pollutants. However, on September 22, 1992, the entire County of San Bernardino was proposed for designation as a federal non-attainment area for PM10 (particulates smaller than 10 microns). In addition, the site is located close to the Southeast Desert non-attainment area for ozone, and some of the materials recovery facilities and train routes to Bolo Station would be located in federal non-attainment areas for ozone, carbon monoxide, and PM10. ② Section 5.7.1.2.1 (DEIS, p. 5.7-8) also states that the proposed project would result in exceedences of State and federal PM10 standards as well as a four percent increase in combined nitrogen oxide (NOx) and reactive organic gas (ROG) emissions in the Southeast Desert Air Basin. ③

Pursuant to §176(c) of the Clean Air Act (CAA), as amended November 15, 1990, there is an affirmative responsibility imposed on all federal agencies to assure that their actions conform to the attainment plan as approved for the area. It is these provisions of the CAA which address whether or not the project would interfere with attainment or maintenance. Pursuant to §176(c), conformity to an implementation plan means:

> "conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards; and
>
> "that such activities will not (i) cause or contribute to any new violation of any standard in any area; (ii) increase the frequency or severity of any existing violation of any standard in any area; or (iii) delay timely attainment of any standards or any required interim emission reductions or other milestones in any area."

The DEIS states that the proposed action may not be consistent with the County's 1991 Air Quality Attainment Plan (page 5.7-17), which was developed pursuant to the California Clean Air Act. The FEIS should acknowledge the specific requirements of §176(c) of the **federal** Clean Air Act and discuss how these requirements would be met. Specifically: ④

a. The FEIS should identify the federally designated non-attainment areas potentially affected by any aspect of the proposed project (including the proposed San Bernardino County ⑤

PM10 non-attainment area) as well as the potential impacts of the proposed project on these areas. ⑤ CONT.

b. The DEIS indicates that the four percent increase in combined NOx and ROG in the Southeast Desert Air Basin would result in an increase in the frequency and magnitude of exceedences of the State ozone standards in the area. The FEIS should discuss whether, and to what degree, the proposed project would cause or contribute to new violations of **federal** ozone, PM10, and carbon monoxide standards in the Basin. ⑥

c. The FEIS should discuss whether the Reduced Action Alternative would meet the conformity requirements of §176(c) of the Clean Air Act. ⑦

2. The DEIS lists impacts that would be considered significant if they were to occur as a result of the proposed project (p. 5.7-1). This list should also include as a significant impact failure to conform to the approved attainment plan pursuant to §176 of the Clean Air Act. ⑧

3. If the San Bernardino County PM10 non-attainment area is officially designated, the gas management system's projected PM10 emission rate of approximately 175 tons per year would render the landfill a major new source for PM10. If the County is designated before construction begins on the landfill, the proponents may need to apply to the San Bernardino County Air Pollution Control District for New Source Review. The project proponents should consult with the District regarding this issue. The FEIS should discuss the New Source Review permitting requirements applicable to the proposed project. ⑨

4. The FEIS includes a list of measures incorporated into the project design in order to minimize or mitigate impacts to air quality (pages 5.7-18 and 5.7-21). The Record of Decision should include a commitment to these measures as well as other measures to fully mitigate project-related air quality impacts. ⑩

Water Resources

1. Comparison of information available in the DEIS (figures 3.5, 4.4.10, and 4.4.11) indicates that groundwater (and potential contaminants) in the uppermost aquifer would travel from beneath the vicinity of cell 46 a horizontal distance of up to two miles before encountering a monitoring well at the southwest corner of the proposed facility boundary in the vicinity of cell 11. Along the horizontal flowpath, a molecule of relatively fresh groundwater flowing south from beneath the northern part of the proposed facility would encounter a fresh/brackish water interface, as schematically illustrated in Figure 4.4.7. Because of the difference in density between the two fluids, or because of the presence of a subsurface bedrock ridge (p. 4.4-27), the molecule of water would encounter an upward vertical gradient along the fresh/brackish water interface or "current transition line" as identified in Figure 4.4.11. This line curves beneath the proposed landfill from the northwest to the southeast. The presence of an upward vertical gradient has been confirmed in a piezometer cluster in the southwest corner of the proposed facility (DEIS, p. 4.4-31). ⑪

Additionally, figures 4.4.7 and 4.2.6 show that monitoring wells and piezometers intercept alluvial sands and gravels in the northern part of the facility and lacustrine silts and clays to the south. Along a flowpath from the northeast to the southwest beneath the facility, a molecule of groundwater may move from unconfined conditions in the alluvium to "localized semiperched or semiconfined condition" in the lacustrine silts and clays (DEIS, p. 4.4-18). ⑪ CONT.

Given: (1) the stratigraphic complexity and the potential for upward vertical gradients along the fresh/brackish water interface, and (2) horizontal travel distances of groundwater for up to two miles before a monitoring well is encountered, the FEIS should identify how a monitoring well network installed along the facility boundary would specifically comply with the groundwater monitoring requirements of 40 CFR §258.51(a)(2) which states:

> "A groundwater monitoring system must be installed that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that represent the quality of groundwater passing the relevant point of compliance."

2. The FEIS should include a map depicting the location of the proposed monitoring well network with respect to the phased sequence of landfill infilling, such as on Figure 3.5. The FEIS should also summarize the screened intervals of the monitoring wells and piezometers and the geologic units spanned by the intake intervals. ⑫

3. The FEIS should include a water level contour map (at a scale of 1" = 1,500') that accounts for the pumping of the Leslie Salt Company wells and National Chloride wells. ⑬

4. Because concentrations of total dissolved solids (including metals such as barium and chromium) vary widely in the groundwater beneath the proposed facility, the FEIS should ⑭

specify how the background groundwater quality will be represented pursuant to 40 CFR §258.51(a)(1). ⑭ CONT.

5. According to the DEIS, Chambless Wash is not a tributary to a water of the U.S. because no evidence of a high water mark could be found (p. 4.4-9). However, evidence of a high water mark is not the only factor defining a water of the U.S. If the wash has a defined bed and bank and is a tributary to waters of the U.S., it may in fact be a water of the U.S. The FEIS should discuss any evidence of these other features. ⑮

6. According to the DEIS, the diversion ditches and retention ponds would be sized for the 25-year, 24-hour storm. We recommend that BLM seriously consider requiring a more conservative design, such as one with the capacity for a 100-year, 24-hour storm. ⑯

Resource Conservation and Recovery Act

1. Revised requirements for municipal solid waste disposal facilities and practices have been issued under the Resource Conservation and Recovery Act (RCRA, Subtitle D), 40 CFR Parts 257 and 258. These requirements address landfill siting, design, operation, groundwater monitoring, corrective action, closure, post-closure care, and financial assurance.

EPA Region 9 is reviewing California's municipal solid waste landfill permitting program to determine if it is adequate to ensure compliance with the new Subtitle D criteria. The authority to conduct this review and to make a determination of adequacy stems from §4005(c) of RCRA. Region 9 plans to make an adequacy determination before the new federal criteria take effect on October 9, 1993.

EPA's actions with respect to California's solid waste program will have an impact on the specific requirements that landfill owner/operators in California must meet. If the State program is approved, owner/operators have the flexibility to follow alternatives to the federal prescriptive standards and compliance schedules, subject to the approval of State enforcement authorities. This flexibility does not exist if the State program is unapproved.

EPA plans to issue partial program approvals. We will approve those parts of a state program that do not require regulatory changes to achieve compliance with Subtitle D, and withhold approval for parts of the program that do require regulatory changes until the changes are made. For unapproved parts of a state program, operators will have to ensure strict compliance with the Subtitle D standards and document their compliance in an operating record.

The record of decision and solid waste permit application should address Subtitle D compliance with respect to both approved and unapproved parts of California's municipal solid waste landfill permitting program. ⑰

2. The proposed project would involve reapplying collected leachate to the working face of the landfill. According to 40 CFR 258.28, leachate derived from the MSWLF may not be placed in MSWLFs unless the unit is designed with a composite liner and leachate collection system as described in 40 CFR 258.40(a)(2). Because the proposed liner design is an alternative to that prescribed in 40 CFR 258.40, the project, as proposed, may not comply with the Part 258 liquids ban requirement. The FEIS should address this issue. ⑱

3. If reapplication of the leachate is not approved by the California Regional Water Quality Control Board, leachate would be collected in leachate evaporation ponds. Analysis of the leachate would be necessary in order to determine whether it constitutes a characteristic RCRA waste. If so, the leachate evaporation ponds would need to be designed and managed to comply with the provisions of RCRA Subtitle C. The FEIS should discuss the procedures that would be implemented to sample and analyze leachate for hazardous constituents, and how the leachate would be treated and the ponds designed and managed to meet the requirements of RCRA Subtitle C. ⑲

Furthermore, even if the leachate is not a characteristic RCRA waste, the sludge from the evaporation ponds could be. If the sludge is a characteristic RCRA waste, it would be subject to the provisions of RCRA Subtitle C. The FEIS should discuss the treatment and management of the evaporite sludge in the leachate evaporation ponds.

Biological Resources

1. The FEIS should include the biological opinion for the desert tortoise because the consultation process can result in the identification of mandatory, reasonable, and prudent alternatives which can significantly affect project implementation. Both the biological assessment and the EIS must disclose and evaluate the potential impacts of the proposed action on listed species. The FEIS and Record of Decision should not completed prior to the completion of consultation pursuant to §7 of the Endangered Species Act. ⑳

2. The FEIS should discuss how creosote and other plant species with roots deeper than one foot would be precluded from reestablishing on the landfill cover. The FEIS should also discuss the specific advantages of the proposed two-feet thick topsoil cover compared to a one-foot thick topsoil cover (e.g., greater plant species diversity or number of animal burrows). ㉑

3. The proposed project would disturb or eliminate 50 acres of desert wash scrub and 480 acres of sand dunes at Bolo Station. The FEIS should provide an estimate of the acreage of sand dunes on the Cadiz offered land site and the acreage of desert wash scrub on the combined offered lands. ㉒

Land Management

Currently under consideration in the U.S. Congress are bills that would designate certain lands in the California desert as wilderness, national parks, and monuments. The FEIS should discuss any potential impacts of the proposed project on lands that are being considered for special designation such as the Bristol Mountains, Cadiz Dunes, and Old Woman Mountains proposed wildernesses. ㉓

DOCUMENT 003
U.S. ENVIRONMENTAL PROTECTION AGENCY
RESPONSE TO COMMENTS

Response 003-1

1. Revised and clarified information has been provided in Chapters 4.0 and 5.0 of the Supplement regarding air quality and ground water quality impacts. In response to specific comments from the U.S. Environmental Protection Agency (EPA) and other commenters on the Draft EIR/EIS, revised and clarified information has also been included in the Supplement regarding design and management of the leachate collection system, landfill cover and desert tortoise.

Response 003-2

1. Revisions to the Draft EIR/EIS included in Chapter 2.0 of this Final EIR/EIS, specify the nonattainment status of the air basins affected by the proposed project, including the recent designation of the County of San Bernardino as a nonattainment area for PM_{10}.

Response 003-3

1. Comment acknowledged. Chapter 2.0 of this Final EIR/EIS details the nonattainment status of the proposed activity in the SEDAB.

Response 003-4

1. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMDs Air Quality Attainment Plan related to emission reductions for ozone precursors.

2. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two or three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response 003-5

1. The proposed landfill potentially affects three federally designated nonattainment areas:

   - South Coast Air Basin (SCAB) Nonattainment Area: The proposed site is outside of this area, but trains hauling waste to the site are expected to depart from MRF's located within the SCAB. Section 5.4 of the Supplement provides additional information regarding the contribution of the proposed action to the SCAB nonattainment area. As noted in the Supplement, the trains hauling waste to the proposed site that travel through the SCAB do not contribute to violations of air quality standards in the SCAB.

   - SEDAB Ozone Nonattainment Area: The proposed site is outside this area, but the train traffic from Cajon pass to the proposed site would increase emissions within the nonattainment area. Locomotive emissions for Rail•Cycle trains in 2010 are indicative of project impacts on this nonattainment area:

POLLUTANT	TONS PER YEAR
NO_x	203
ROG	40
CO	137
SO_x	12
PM_{10}	11

   - San Bernardino County PM_{10} Nonattainment Area: Based on data from the Rail•Cycle onsite monitoring station, exceedance of federal and state ambient standards for PM_{10} in the site vicinity are related to wind-blown dust from the surrounding desert area. Maximum project impacts are estimated at 46 micrograms per cubic meter, occurring under low wind speed conditions (i.e., wind speeds of less than 10 miles per hour). It is not anticipated that onsite emissions would contribute to a violation of PM_{10} standards unrelated to wind-blown dust.

Response 003-6

1. A revised analysis of project emissions (Rail•Cycle, 1993a) concludes that combined NO_X and ROG emissions at full site development in 2010 will be 1.7 tons per day, representing an increase in the current planning inventory baseline (261 tons per day) of 0.6 percent. To the extent that these emissions are not offset or mitigated in attainment plans and control measures adopted by the MDAQMD, they would delay attainment of ozone standards. Determination of the significance of such delay is not possible given the major influence of interbasin transport on ozone concentrations in the SEDAB.

Response 003-7

1. The Reduced Action Alternative would have a slightly lower, but qualitatively similar, level of impacts on existing and proposed federal nonattainment areas. Accordingly, its degree of conformity is similar to that of the proposed action.

Response 003-8

1. See Response 003-4.

Response 003-9

1. A revised New Source Review regulation is currently being drafted by the MDAQMD. When a permit to construct a gas management facility (flare or energy recovery system) is needed, Rail•Cycle will comply with the requirements of the rule in effect at the time. These requirements will depend upon the level of emissions, which will be determined at the time based on actual gas flow characteristics. To the extent the New Source Review rule requires emission offsets, they will be obtained. Accordingly, net emission increases would be lower than those set forth in the Draft EIR/EIS (Rail•Cycle, 1993a), which did not assume emission offsets.

Response 003-10

1. As required by NEPA, BLM's Record of Decision for the proposed action will include a statement that the mitigation measures included in the EIR/EIS, will be implemented. A Mitigation Monitoring and Compliance Program has been developed for the proposed action to assure that the mitigation measures are implemented. This program fulfills NEPA's requirements for mitigation monitoring.

Response 003-11

1. Information to respond to this comment was included in the Draft EIR/EIS and the Supplement. As described in Sections 3.3.3.3 and 5.4.5.1 of the Draft EIR/EIS and Section 5.2.2.4 of the Supplement, a ground water monitoring well system would be installed. The ground water Detection Monitoring Program would conform to CCR Title 23, Subtitle D, and the requirements of the RWQCB.

2. Background monitoring wells would be spaced along the upgradient edges of the landfill footprint and point of compliance monitoring wells would be spaced along the downgradient edges of the landfill footprint to provide a detection monitoring system in accordance with CCR Title 23, Subtitle D, and the requirements of the RWQCB. Figure 5.2.2 of the Supplement shows the proposed locations for these wells. The point of compliance wells would be located near the leachate collection sumps, the most probable point of leachate release. These point of compliance wells would constitute the ground water compliance point for the facility. Screened intervals and specific locations of these wells would be determined at the time of installations in consultation with the RWQCB and may be in different locations than those shown in Figure 5.2.2 of the Supplement.

3. The monitoring well system would be augmented by an unsaturated zone monitoring (UZM) system beneath the landfill liner as described in Section 3.2.4.1 of the Supplement. The UZM system is being required by the RWQCB for "mega-landfills" such as the proposed Bolo Station Landfill.

Response 003-12

1. A map of the proposed location of background and point of compliance wells was shown in Figure 5.2.2 of the Supplement. Screened intervals for future wells would be determined at the time of installation since the ground water level is not confirmed in the specific locations. Screened intervals would be 5 feet above the highest known ground water level and 20 feet below the lowest projected ground water fluctuation due to drought or water use.

Response 003-13

1. A water level contour map was developed based on data collected during April 1991 when the Cargill Salt Wells were pumping and was provided as Figure 4.2.1 of the Supplement.

Response 003-14

1. Background water quality for the proposed landfill would be based on data obtained from background wells operating over the life of the landfill, and from point of compliance wells during the one-year minimum period during which each well is monitored before landfilling begins upgradient of the well. Quarterly samples would be taken from each well and analyzed for constituents of concern specified in 40 CFR 258 and CCR Title 23, Chapter 15, Article 5. Background ground water quality would be characterized from the data using statistical methods approved in advance by the RWQCB through its issuance of Waste Discharge Requirements (WDRs).

2. Primary emphasis in the characterization and monitoring of ground water would be placed on the organic constituents of landfill leachate and gas.

Response 003-15

1. LSA and Associates, Inc. (LSA) prepared a detailed analysis of the regulatory definition of the waters of the United States and limits of jurisdiction as applied to the proposed action (LSA, 1992). LSA evaluated drainages on the proposed site in terms of evidence of surface flows, continuity of the drainages across the site, and presence of an ordinary high water mark (OHWM). The LSA report was submitted to the U.S. Army Corps of Engineers (COE).

2. COE regulation (Preamble, Part 328) states that, "... in the absence of wetlands, the upstream limit of jurisdiction stops when the OHWM is no longer perceptible, i.e., areas lacking an OHWM are not jurisdictional." Based on this definition and the lack of continuity of the onsite drainages, it was concluded by LSA that the Chambless Wash is not a part of a tributary system to waters of the United States (LSA, 1992).

3. On March 17, 1992, the COE issued a letter stating that a Section 404 permit was not necessary for the proposed action based on review of the LSA report. A copy of this letter was included as Appendix E in the Draft EIR/EIS.

Response 003-16

1. Based on ongoing refinement of the design for the proposed landfill, Section 5.2 of the Supplement indicated that stormwater run-on and runoff control structures and features would be designed to meet the 100-year, 24-hour storm event, rather than the 25-year, 24-hour storm event for certain drainage features as stated in the Draft EIR/EIS. A mitigation measure was also included in Section 5.2.2.1 of the Supplement requiring the design, construction and maintenance of temporary and permanent diversion and drainage ditches, and temporary and permanent retention and sediment basins for the control of stormwater run-on and runoff for the 100-year, 24-hour storm event.

Response 003-17

1. The proposed landfill is being designed to meet or exceed Subtitle D, and CCR Titles 14 and 23. In October 1993, the EPA approved California's Subtitle D compliance program. The design and operation of the proposed landfill will be shown, through the permitting process, to comply with applicable state and federal regulations. BLM's Record of Decision will appropriately note the requirement that the proposed action must comply with California's approved Subtitle D program.

Response 003-18

1. This comment is correct that Rail•Cycle's preferred option is to reintroduce leachate and landfill gas condensate into the waste at the working face rather than to route these liquids to a leachate evaporation pond(s). However, as discussed below, this comment is not correct in stating that Rail•Cycle's proposed composite liner may not comply with the composite liner requirements of 40 CFR 258.40(a)(2).

2. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS, and Section 3.2.4.1 of the Supplement, RWQCB has indicated that an alternative composite liner system consisting of a double FML and vadose zone landfill gas monitoring could be required as part of the WDRs for proposed "mega-landfills" such as the Bolo Station Landfill. In response to RWQCB, Rail•Cycle is proposing a double-composite liner system that consists of the following components.
    - Prepared subgrade.
    - Unsaturated (vadose zone) monitoring (UZM) system.
    - 60-mil high density polyethylene (HDPE) or equivalent flexible membrane liner (secondary liner).
    - Geonet drainage layer and collection trench and pipe (secondary collection).
    - Geosynthetic clay liner (primary liner).
    - 60-mil HDPE or equivalent flexible membrane liner (primary liner).
    - Geonet drainage layer collection trench and pipe (primary collection).
    - Nonwoven geotextile silt filter layer.

- A 2-foot thick protective soil layer.
- Selected waste (initial lift will be screened to remove objects that could damage liner).

Cross sections depicting the components of Rail•Cycle's proposed double-composite liner and the standard Subtitle D composite liner were shown on Figure 3.2 of the Supplement.

3. While Rail•Cycle's proposed liner is an alternative to 40 CFR 258.40(b) that requires a single flexible membrane liner (FML) and a minimum 2-foot thick layer of compacted low permeability soil ($1x10^{-7}$ cm/sec), it is Rail•Cycle's engineering opinion that the proposed liner exceeds the performance standards required by Subtitle D. An analysis has been conducted by Rail•Cycle that demonstrates that the proposed liner exceeds the performance requirements of 40 CFR 258.28(a)(2) for a composite liner and leachate collection system, if leachate and condensate are to be reintroduced into the waste column (Rust, 1993a).

4. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS, approval of Rail•Cycle's proposed liner is a permitting issue involving the LEA, CIWMB, and RWQCB. As Rail•Cycle's proposed liner is expected to exceed the performance standards of the Subtitle D liner, Section 5.4.5 of the Draft EIR/EIS includes a mitigation measure that requires installation of the proposed liner. Implementation of this mitigation measure is contingent, as are other mitigation measures, on the approval of appropriate regulatory agencies. This mitigation measure has been modified in this Final EIR/EIS (see Table S.2) to indicate that Rail•Cycle's proposed liner or an equivalent approved liner shall be installed. This modification in the mitigation measure recognizes that variations in the liner system may be required during the permitting process or may occur through the final engineering and design process.

Response 003-19

1. If reintroduction of leachate and gas condensate is not approved by the RWQCB, CIWMB, and LEA, evaporation ponds with double-composite liners would be designed and constructed to comply with RCRA Subtitle C.

2. In the event liquids are disposed in a lined evaporation pond, Rail•Cycle would have the liquids and the evaporite (sludge) analyzed in accordance with RCRA Subtitle C procedures for classifying waste. If the evaporite is determined to be hazardous, the material would be handled, transported and disposed of at an approved disposal facility or other appropriate hazardous waste treatment facility in accordance with applicable state and federal regulations.

Response 003-20

1. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

Response 003-21

1. In response to other comments on the Draft EIR/EIS, the topsoil layer over the final cover of the landfill was increased to 2-to 3-feet, from 1-foot described in the Draft EIR/EIS. This change was made after consultation with U.S. National Park Service's (NPS) - Joshua Tree National Monument Center for Arid Land Restoration and was described in Section 3.2.7 of the Supplement.

2. A mitigation measure has been included in this Final EIR/EIS (see Table S.2) that requires Rail•Cycle to develop a detailed revegetation plan for the proposed landfill in consultation with NPS, Joshua Tree National Monument. This mitigation measure includes a requirement that Rail•Cycle establish a nursery at Bolo Station for germination and growth of native shrubs. These nursery-grown native plants would be transplanted to the closed cell and planted in an island configuration, similar to the surrounding vegetated communities. Plants would be artificially watered for one to two months. If drought conditions exist, the irrigation would continue for several months, thereby enabling the shrubs' root systems to become established. Overhead irrigation may be temporarily used on the landfill sideslopes to assist in the initial establishment of the revegetation; however, only a drip irrigation system would be used on the top slopes of the landfill. If long-term irrigation is required on the sideslopes a drip system shall be installed.

Response 003-22

1. As a point of clarification, the 480 acres of "sand dunes" referred to in the comment as being disturbed or eliminated by the proposed action is more accurately described as "desert dune scrub habitat." This reference is to a plant community,

not to a landform. As described in Section 4.5.2.1.1 of the Draft EIR/EIS, this plant community contains elements in common with the more prevalent creosote bush scrub and creosote bush-allscale communities, with the addition of several species characteristic of sandy areas.

2. The three sections of offered lands that would be exchanged as part of the proposed action were selected by BLM primarily on the basis of their wildlife habitat values, particularly desert tortoise habitat.

3. The Cadiz Valley Offered Lands were selected by BLM based on its location adjacent to the Cadiz dunes, a sensitive biological area with desert scrub and sand dunes. The total acreage of desert dune scrub and desert wash habitat on this site has not been characterized, but it is likely to be less than the 480 acres of desert dune scrub that would be disturbed or eliminated by the proposed action. The southwest quarter (estimated to consist of approximately 160 acres) of this offered lands site is characterized as active sand dune and the upland portion has boulder, cobble and exposed bedrock.

4. The literature research and field study of the Piute Valley Offered Lands found a vegetation community dominated by creosote bush-bursage associations. The site contains a variety of cacti and other plants that are common to the creosote bush community, but are lacking at the Bolo Station site.

Response 003-23

1. The proposed action does not lie within areas being considered for special designation under the proposed California Desert Protection Act. The closest areas to the project site being proposed for protection are the Marble Mountains Wilderness Area (four miles to the north) and Sheephole/Cadiz Wilderness (four miles to the south). The proposed Old Woman Mountains Wilderness Area is located approximately 16 miles to the west of the project. The proposed Bristol Mountains Wilderness Area is located approximately 16 miles to the north of the project. The above wilderness areas, as well as other special management areas in the CDCA in the general area of the proposed action are shown in Figures 4.14.1, 4.14.2, and 4.14.3, and are discussed in Sections 4.14.1.2.1 and 5.14.1.1.3 of the Draft EIR/EIS.

2. The proposed action would have no impact on the lands proposed for protection under California Desert Protection Act. This determination is based on information about the proposed action's potential environmental effects detailed in the Draft EIR/EIS, which, with respect to the proposed wilderness areas, become less significant by the distance of the proposed project site from these lands, as well as specific language in California Desert Protection Act which states:

   > "The Congress does not intend for the designation of Wilderness Areas in . . . this Act to lead to the creation of protective perimeters or buffer zones around any such Wilderness Area. The fact that non-wilderness activities or uses can be seen or heard from areas within a wilderness area shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area" (Section 105, January 1993).

3. With regard to areas not included in the California Desert Protection Act which may previously have been considered for wilderness designation (including the Ship Mountains Wilderness Study Area, which covers a portion of the Cadiz Valley Alternative site), California Desert Protection Act states:

   > "The Congress hereby finds and directs that lands in the California Desert Conservation Area, of the Bureau of Land Management, not designated as Wilderness or Wilderness Study Areas by this Act, have been adequately studied for Wilderness designation pursuant to Section 603 of the Federal Land Policy and Management Act of 1976 (90 Stat. 2743 43 U.S.C. 1701 et seq.) and are no longer subject to the requirements of Section 603(c) of the Federal Land Policy and Management Act of 1976 pertaining to the management of Wilderness Study Areas in a manner that does not impair the suitability of such areas for preservation as wilderness" (Section 108).

4. Based on the above, neither the proposed action nor its alternatives would have an adverse impact on lands being considered for protection under the proposed California Desert Protection Act.

SECTION 2.2

STATE/REGIONAL AGENCIES COMMENTS AND RESPONSES

004

JAN 1993 RECEIVED BY

ADDRESS ALL COMMUNICATIONS TO THE COMMISSION
107 SOUTH BROADWAY, ROOM 51(
LOS ANGELES, CA 90012
TELEPHONE: (213) 897- 3565

Public Utilities Commission

STATE OF CALIFORNIA

FILE NO.
183/36/EIR/EIS/
2-658.3 (& M.P. 655.7)

December 28, 1992

County of San Bernardino
Planning Department
385 N. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182

Attention: Mr. Randy Scott, Senior Planner, Environmental Team

Dear Mr. Scott:

This is in response to your letter, dated November 25, 1992, regarding the Draft Environmental Impact Report/Draft Environmental Statement (Draft EIR/EIS) for the Bolo Station Landfill proposed by the Rail-Cycle Corporation (State Clearinghouse Number: 91092020).

The Commission Staff has reviewed the information submitted and believes consideration should be given to the impacts affecting the railroad operations, railroad grade crossings, and railroad grade separations shown on the following figures:

FIGURE	FIGURE NUMBER
REGIONAL LOCATION MAP	FIGURE 1.1
SITE VICINITY MAP	FIGURE 1.2
SITE LOCATION MAP	FIGURE 1.3
SYSTEM WIDE WASTE-BY-RAIL HAUL ROUTES	FIGURE 3.2
URBAN SOUTHERN CALIFORNIA WASTE-BY-RAIL HAUL ROUTES	FIGURE 3.3
PLAN VIEW OF THE BOLO STATION LANDFILL SITE	FIGURE 3.4
LANDFILL CELL LAYOUT	FIGURE 3.5
FINAL GRADE AND SURFACE WATER CONTROL OF COMPLETED LANDFILL	FIGURE 3.9
CONCEPTUAL LEACHATE COLLECTION SYSTEM	FIGURE 3.12
LANDFILL GAS COLLECTION SYSTEM	FIGURE 3.14
BOLO STATION TYPICAL OFFLOADING FACILITY/RAILYARD -	FIGURE 3.15
AMBOY/CADIZ VALLEY ALTERNATIVE SITES	FIGURE 3.17
SOUTHERN CALIFORNIA DESERT REGIONAL PROJECT ALTERNATIVES	FIGURE 3.18
SAN BERNARDINO COUNTY DESERT REGIONAL ALTERNATIVES	FIGURE 3.19
SURFACE GEOLOGY OF THE PROJECT REGION	FIGURE 4.2.1
REGIONAL PHYSIOGRAPHY AND DRAINAGE FEATURES	FIGURE 4.2.2
FAULTS WITHIN THE PROJECT REGION	FIGURE 4.2.3
REGIONAL EARTHQUAKE EPICENTERS	FIGURE 4.2.4
SURFACE GEOLOGY BOLO STATION SITE	FIGURE 4.2.5
SURFACE GEOLOGY CADIZ VALLEY ALTERNATIVE SITE	FIGURE 4.2.7
RAIL TRANSPORTATION SEGMENTS	FIGURE 4.12.1

①

FIGURE	FIGURE NUMBER
URBAN SOUTHERN CALIFORNIA WASTE-BY-RAIL HAUL SITES	FIGURE 4.12.2
EMERGENCY ALTERNATE RAIL LINE ROUTING	FIGURE 4.12.3
LAND USE BOLO STATION SITE VICINITY	FIGURE 4.14.4
LAND USE CADIZ VALLEY ALTERNATIVE SITE AND CADIZ VALLEY OFFERED LANDS SITE VICINITY	FIGURE 4.14.5
LAND USE PIUTE VALLEY OFFERED LANDS SITE	FIGURE 4.14.6
LAND USE FENNER VALLEY OFFERED LANDS SITE	FIGURE 4.14.7
LOCATION OF RECENT SEISMIC ACTIVITY	FIGURE 5.2.1
VIEWPOINT LOCATIONS VISUAL RENDERINGS	FIGURE 5.9.1
PROJECTS IN THE CUMULATIVE IMPACT STUDY REGION	FIGURE 6.1

① CONT.

We will be especially concerned with any change in circulation patterns of vehicles which could affect railroad operations and safety considerations at railroad-highway at-grade crossings and grade separations. Review of further growth, estimated vehicular traffic, and probable land use may indicate necessary improvements to some of these at-grade crossings, closure of other crossings, and/or construction of grade separation structures at certain locations. All future Draft EIR/EISs and the Final EIR/EISs, therefore, should consider the above.

Thank you for allowing us the opportunity to comment on this matter. We appreciate your keeping us informed of all the above matters, with which the Commission staff is concerned. If you require further information, please contact me at the above address and telephone number.

Very truly yours,

Steven Handelman

STEVEN HANDELMAN
Transportation Engineer
Traffic Engineering Section
Safety Division

cc: Roy Smith, Railroad Consultant, Rail-Cycle, Inc.

DOCUMENT 004
CALIFORNIA PUBLIC UTILITIES COMMISSION
RESPONSE TO COMMENTS

Response 004-1

1. The potential impacts at the various rail/highway grade crossings leading to the Bolo Station site were addressed in Sections 4.12 and 5.12 of the Draft EIR/EIS and in Appendix I, where Table I.2 provided the hazard index for Existing Conditions and Tables I.3 and I.4 provided the hazard index for operation of the proposed landfill at 3,000 and 21,000 tons per day. In response to other comments on the Draft EIR/EIS, the analysis of grade crossings was expanded to include Los Angeles, Orange, Riverside and Kern counties, in addition to San Bernardino County. The results of this expanded analysis were included in Appendix F of the Supplement.

2. While the proposed action would result in an incremental increase in the number of trains using identified rail segments, the U.S. Department of Transportation, Federal Railroad Administration, and California Public Utilities Commission (PUC) administer a program within the state to improve railroad/roadway grade crossings. This program acknowledges that increases in the volume of train traffic and/or increases in vehicular traffic on roadways that cross rail lines, that occur incrementally over time, may require improvements at various grade crossings. These improvements may consist of additional rail crossing safety devices to warn drivers of vehicles of an approaching train, or even physical separation of rail lines from roadways through the construction of overpasses/underpasses.

3. The regulatory mechanism to initiate crossing improvements does not involve Rail•Cycle. Requests for new improvements are generally as a result of urban growth surrounding the railroad and are initiated by the respective jurisdictions. These requests are evaluated and prioritized by the PUC for recommended funding. Grade crossing improvement projects identified through this program are jointly funded by the federal and state government and the railroad companies.

4. The incremental increase in the number of trains for the proposed action would not result in changes in vehicular circulation patterns along the various rail segments The proposed project includes construction of a private overpass at the landfill.

5. The proposed action is just one of various projects that result in incremental increases over time that requires improvement of railroad/roadway grade crossings. The EIR/EIS provides adequate information to characterize the impact the proposed action would have on grade crossings. As there is a program established to address these types of incremental impacts at grade crossings and fund the necessary improvement, no specific mitigation measure is required for the proposed action.

6. In addition to the information provided in the Draft EIR/EIS, an April 14, 1993, letter from the PUC to Rail•Cycle, indicates that the following rail line improvements are either being currently implemented, or are planned for implementation in the near future on rail segments potentially used by the proposed action:

   - From Los Angeles to Fullerton, various signal improvements and grade separations have been planned and/or completed in connection with the Los Angeles-San Diego Amtrak Corridor.
   - Along the Placentia Corridor, crossings have been placed on the PUC's Recommended List of Public Crossings in California for Improved Crossing Protection with Federal Funding (Section 130), and it is the PUC's understanding that service contracts for these projects have been procured.
   - In the Riverside Segment, crossings through Riverside have also been placed on the PUC Section 130 List.
   - From Riverside to Barstow and on to Amboy, several new recommendations were placed on the most recent PUC Section 130 List.
   - In April, 1993, crossings from San Bernardino to Amboy were reviewed by the PUC and ATSF. This review will result in the submittal of several additional crossings onto the PUC Section 130 List.

   While these improvements are not a result of the proposed action, they would reduce a portion of the incremental impact from Rail•Cycle.

005

STATE OF CALIFORNIA—THE RESOURCES AGENCY
PETE WILSON, *Governor*

DEPARTMENT OF FISH AND GAME
330 GOLDEN SHORE, SUITE 50
LONG BEACH, CA 90802

(310)590-5113

January 4, 1992

Mr. Randy Scott
County of San Bernardino
Planning Department
385 N. Arrowhead Ave. Third Floor
San Bernardino, California 92415-0182

Dear Mr. Scott:

The Department of Fish and Game (DFG) would like to comment on the proposed construction and operation of the Rail Cycle-Bolo Station Landfill and the issuance of associated right-of-way grants and land exchange. The following comments are suggested by the DFG's representative for desert tortoise issues, Mr. Frank Hoover (Department of Fish and Game, Chino Fish and Wildlife Base, 4775 Bird Farm Road, Chino, California 91709, phone 714-597-8235).

The following comment is in reference to page 5.6-5, column 1, section 3 of the Draft Environmental Impact Report: Results of the raven baseline study and monitoring program should be supplied to the Bureau of Land Management (BLM), the United States Fish and Wildlife Service (USFWS), and the DFG on at least a semi-annual basis. ① A raven monitoring working group should be established at the time the baseline study begins to oversee all raven population studies, evaluate data, evaluate effectiveness of the bird control measures and landfill operations, and decide if an active raven population control program is necessary. The working group should consist of representatives of the BLM, USFWS, DFG, Rail Cycle, and any other agency representatives or individuals that the federal or state agencies believe appropriate. ②

Consistent with the policies of the California Endangered Species Act (CESA), DFG maintains that there should be permanent protection for the desert tortoise and its habitat to assure the conservation, restoration, and long-term survival of this state-listed species. An Endangered Species Permit for "take" of desert tortoise will be required under authority of Section 2081 of the California Fish and Game Code. A Memorandum of Understanding (MOU) will also be required. In the event that a desert tortoise is encountered, the MOU will authorize a specific tortoise-knowledgeable person to handle and move the tortoise. ③

005

Mr. Randy Scott
January 4, 1993
Page Two

If you have any further questions, you may contact Mr. Curt Taucher, Environmental Services Supervisor (Department of Fish and Game, 330 Golden Shore, Suite 50, Long Beach, California 90802, phone 310-590-5137) or Becky Jones, Environmental Services (36431 41 Street East, Palmdale, California 93550, phone 805-274-0562).

Sincerely,

C Taucher

Fred Worthley for
Regional Manager, Region 5

cc: Mr. Doug Romoli, BLM
Mr. Raymond Bransfield, USFWS
Mr. Dave Showers, DFG-ESD
Mr. Frank Hoover, DFG-IF

DOCUMENT 005
CALIFORNIA DEPARTMENT OF FISH AND GAME
RESPONSE TO COMMENTS

Response 005-1

1. As requested by the commenter, results of the raven baseline study and monitoring program will be supplied to BLM, USFWS, and CDFG at least on a semiannual basis.

Response 005-2

1. Rail•Cycle, in consultation with BLM and USFWS, conducted a baseline raven study that included an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys documented raven populations and usage patterns. Baseline data will be compared to that collected during the operation of the proposed landfill.

2. A "working group" consisting of BLM, USFWS, CDFG, Rail•Cycle and other agencies or individuals suggested by the commenter was not established at the outset of the study. As the federal lead agency, BLM must make a determination as to the need for a "working group." BLM has indicated that it will share all progress reports and data developed over the course of the study with USFWS, CDFG, and the County.

Response 005-3

1. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

2. Mitigation measures have been established designating an authorized biologist as the only person permitted to handle tortoise encountered during project construction or operation (see Table S.2 of this Final EIR/EIS for a list of mitigation measures).

3. CDFG was provided a copy of the Biological Assessment, and was consulted by the BLM as part of the Section 7 process with USFWS.

State of California THE RESOURCES AGENCY OF CALIFORNIA

MEMORANDUM

To: Mr. Douglas P. Wheeler Date: January 5, 1993
Secretary for Resources

Mr. Randy Scott
San Bernardino County
385 N. Arrowhead Avenue
San Bernardino CA 92415-0182

RECEIVED
JAN 1993
BY

From: **Department of Conservation**
Governmental and Environmental Relations

Subject: Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS) for the Rail-Cycle Bolo Station Landfill. **SCH #91092020**

The Department of Conservation's Division of Mines and Geology (DMG) has reviewed the DEIR/DEIS prepared by San Bernardino County and the U.S. Bureau of Land Reclamation (BLM) for the above-referenced project. DMG has special expertise in evaluating geologic and seismic hazards and resource issues. The proposed project consists of a Class III municipal waste landfill to be sited on approximately 4800 acres adjacent to Bristol Dry Lake, approximately 3 miles southeast of Amboy. Containerized wastes are to be brought via existing rail lines from metropolitan areas in southern California to the site. To be completed as proposed, the project requires exchange of Federal lands managed by BLM, amendment of the applicable California Desert Conservation Area Plan, and establishment of rights-of-way across Federal lands.

Geologic Resources Issues:

Mineral Resources: The major concern with the proposed project is its potential effects on existing and potential mineral resources. Mineral extraction via pumping of salt brines is the current primary land use in the vicinity of Bolo Station. Bristol Dry Lake is classified as a Known Sodium Leasing Area by BLM (p. 4.1-2). The DEIR recognizes the project's potential to impact groundwater quality, availability, flow rate, depth, and flow patterns in a manner that may degrade the usefulness or availability of the ore brines. The DEIR refers (pgs. 5.3-1, 5.4-3) to a 1991 hydrogeologic analysis on effects of ground water pumping rates as high as 100 gallons per minute and concludes that the probable rates of ground water usage by the proposed project will not impact existing land uses nor increase consolidation of the soils in the southern portion of the Bolo Station site. ①

The Department was unable to review the technical report on which this conclusion was based, because it was not included with the EIR. However, the conclusion seems to be inconsistent with other statements indicating that the Bristol Lake basin already is overdrafted, and with the suggestion (p. 5.4-3) that safe annual levels of ground water withdrawal have not been calculated since 1975. ① CONT.

The DEIR also recognizes that in the event of contamination of the ground water by leakage from the landfill, the usual remediation method (pumping and treating) may further impact the brine body. The proposed mitigation methods (exchange of lands, financial assurances for closure and remediation) will not be adequate if the exchanged lands do not contain equivalent mineral resources and if the financial assurances offered by Rail-Cycle do not contain provision for losses due to environmental impairment and impacts to third parties. The financial assurance mechanism attached as Appendix K does not appear to address these needs. ②

A letter dated June 28, 1991 from Morris Balderman, consulting geologist, to Barbara Ransom of Leslie Salt raises a number of apparently valid technical questions regarding the adequacy of existing data for use in analysis and modeling of ground water conditions and impacts in the Bristol Lake basin. Since relevant technical reports were not available for our review, we cannot tell whether additional, adequate information has been gathered and used in preparation of the DEIR. Balderman's points are germane to the questions of potential conflicts of the proposed project with existing land uses (i.e., mineral extraction). We recommend that San Bernardino County and BLM carefully analyze these issues when considering amendments to the County General Plan and/or to the California Desert Conservation Area Plan. ③

The Department is also concerned with the cumulative impacts on mineral resources that may occur if this project is implemented along with the several other projects and waste facilities (such as Broadwell Basin, Eagle Mountain, Ward Valley Low-Level Radioactive Waste Facility, Hidden Valley Repository) that have been proposed in the region. The DEIR points out (p.6-5) that if all of these projects are completed, over 21,000 acres would be rendered unavailable for mining activity. ④

In conclusion, the proposed Rail-Cycle project has the potential for significant conflicts with existing land uses in terms of causing loss or impaired usability of mineral resources.

Paleontological Resources: The DEIR recognizes the potential for impact on paleontological resources and proposes mitigation measures that appear appropriate, although only vertebrate fossil remains are addressed. It does not appear that plant, freshwater invertebrate, or microfossil resources have been considered. ⑤

Geologic Hazards Issues:

Faults: Neither the Bolo Station site nor the Cadiz Valley alternative site is in an area of known active faulting. However, the DEIR points out (p. 5.2-1) the presence of a photolineament trending north-south towards the Bolo Station site. The photolineament, verified in the field, reportedly does not extend into the proposed landfill site. It is south of the Leslie salt brine extraction wells, and the DEIR suggests that the lineament may be a result of ground water extraction. The Colorado River Basin Regional Water Quality Control Board has requested further studies be done to verify the presence or absence of active or potentially active faults in the site. We would agree that further evaluation of the lineament is indicated. ⑥

Not only may landfills not be sited over an active fault under the requirements of CCR 23, Chapter 15, but resolution of the question of whether the lineament is due to active faulting, to ground water withdrawal or other geologic process is important to the understanding of the site's geologic constraints and to the proposed landfill's potential impacts.

Subsidence: Subsidence cracks have been noted in the area (possibly including the photolineament discussed above) and are attributed to ground water withdrawal. The DEIR states (pgs. 5.4-2, 5.4-6, and 5.4-9) that the ground water basins at both the preferred Bolo Station site and the Cadiz Valley alternative site may already be in overdraft. Subsidence may therefore be exacerbated by continued or increased consumption of water for construction, mining or other purposes. ⑦

Minor Corrections:

In addition to the above comments, some minor errors were noted:

1. The reference to the "Needles Sheet" (Figure 4.2.1) as a publication of the U.S. Geological Survey is incorrect. The "Needles Sheet" (Scale 1:250,000) is part of the Geologic Map of California and is a publication of the Division of Mines and Geology. ⑧
2. The discussion of regulatory and land use issues (pp.2-6 through 2-10) effects an incomplete understanding of the authorities and mechanisms involved. The summary on p. 2-7 of applicable water quality and waste disposal laws and regulations contains several misunderstandings and unclear statements. For example, the text suggests, incorrectly, that authority to impose Waste Discharge Requirements (WDR) is derived from the California Code of Regulations, Title 23. That authority is from the California Water Code (Porter-Cologne Water Quality Act of 1970 -- not 1985 as the text states). ⑨

Title 23, Chapter 15 contains, among other things, specifications regarding geologic conditions for siting of landfills and requirements for financial assurances to be established in the event of a failure of the landfill. ⑨ CONT. Further, the discussion on regulations pertaining to land uses fails to consider the California Surface Mining and Reclamation Act (SMARA). ⑩

If you have any questions regarding these comments, please contact Roger Martin, Division of Mines and Geology Environmental Review Project Manager, at (916) 322-2562.

Deborah L. Herrmann
Deborah Herrmann
Environmental Program Coordinator

cc: Roger Martin, Division of Mines and Geology
Gail Wiggett, Division of Mines and Geology

DOCUMENT 006
RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF CONSERVATION
RESPONSE TO COMMENTS

Response 006-1

1. Subsequent to distribution of the Draft EIR/EIS, additional analysis was conducted to determine the potential impact of the onsite ground water pumping. The results detailed in Section 5.2 of the Supplement indicated that adequate water supply was available for planned onsite water requirements. A copy of the Supplement was provided to this agency.

2. Rail•Cycle has proposed that the wells to supply onsite water needs be relocated to the southeast corner of Section 33 (see Figure 3.1 of the Supplement). The anticipated radius of influence of the ground water drawdown at this location relative to the previous location would reduce the potential impact.

3. The simulated ground water modeling conducted by Rail•Cycle indicated that the proposed ground water pumping of 130 acre-feet per year for onsite uses would not adversely affect other ground water users in the area (i.e., Cargill, National Chloride, or CLC). However, as described in Section 5.2.1.2 of the Supplement, the ground water recharge rate in the basin is uncertain, and proposed future ground water use for the CLC agricultural operation is substantial. Cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin. In the event the Bristol Basin is in overdraft, the use of 130-acre-feet of water per year by the proposed landfill would be considered an unavoidable adverse impact.

Response 006-2

1. The exchange of additional sections of land was not included in Section 5.4.5.1 of the Draft EIR/EIS as a mitigation measure for ground water quality.

2. The financial assurance requirements included in CCR Title 23, Chapter 15, Article 5 and Subtitle D for potential corrective action are considered appropriate and protective of the mineral brine at the proposed site. In the event of ground water contamination, Rail•Cycle would be required to implement appropriate corrective action. Both CCR Title 23 and Subtitle D require protection of ground water as a resource and do not tie the resource value to drinking water. Therefore, if the proposed landfill was determined to be a source of contamination of the brine resource, Rail•Cycle would be required to implement an appropriate corrective action program.

3. As discussed in Section 3.6.2 of the Draft EIR/EIS, the corrective action insurance policy included in Appendix K of the Draft EIR/EIS was an example only. Rail•Cycle would be required to establish an appropriate financial mechanism that meets the requirements of CCR Titles 14 and 23, and Subtitle D. The selected financial mechanism would require the approval of the LEA, CIWMB, and RWQCB.

Response 006-3

1. Sections 5.2 and 5.3 of the Supplement provided the results of the refined analyses conducted subsequent to distribution of the Draft EIR/EIS to evaluate potential ground water quantity and quality impacts. Section 5.3 of the Supplement specifically discussed potential effects of the proposed action on the quantity and quality of the Cargill brine production.

2. The technical reports referenced in the Draft EIR/EIS and Supplement have been provided to the CIWMB, RWQCB, and other agencies.

Response 006-4

1. Information to respond to this comment was included in Sections 4.3, 5.3 and 6.2.2 of the Supplement. In addition to previous studies completed with regard to mineral resources (Jacobs, 1991a; Waiwood, 1994). Condor Earth Technologies was retained by Rail•Cycle to evaluate the potential value of minerals under the proposed site (Condor, 1993). Their report concluded that the market for additional calcium chloride production in the vicinity of the proposed site is limited or nonexistent. The report also noted that the area produces a very small portion of the national production of calcium chloride, and that with the exception of the west half of Section 22, there is no evidence that a potential for mineral development exists at the proposed site.

2. Based on the above, the proposed landfill and the required land exchange is not considered to contribute to the cumulative impact of projects removing land from potential mineral exploitation.

Response 006-5

1. Sections 4.11 and 5.11 of the Draft EIR/EIS included a discussion of the paleontological research methods developed in consultation with BLM and accomplished by the San Bernardino County Museum, and a discussion of the results of the research. Paleontological research for the proposed action consists of a background archival records search and review of existing literature, and a surface survey of the proposed site. Subsurface exploration was not conducted as part of the research program.

2. While this comment is correct in noting that only vertebrate fossil remains are addressed, it misinterprets this to mean that plant, freshwater invertebrate and microfossil resources were not considered. The confidential technical report prepared regarding the paleontological research includes a listing of paleontological resources noted during the surface survey and a discussion of known resources in the project area based on the background archival search (San Bernardino County Museum, 1991). While the technical report is considered confidential by BLM to protect the resource, Section 4.11 of the Draft EIR/EIS summarized the findings of this report, including the number of resource localities, their general location, and the taxa of the fossil resources noted (see Tables 4.11.1 and 4.11.2).

3. The lack of plant, freshwater invertebrate and microfossil resources noted during the field survey is attributed to the following (Springer, 1993):
   - Sediments at the site are not conducive to preservation of plant or invertebrate fossils.
   - Fossils of these types are not readily identified in the field through surface surveys.

4. As discussed in Sections 4.11.3.1.1 and 4.11.3.1.2 of the Draft EIR/EIS, the results of the paleontological archival research and surface survey at the proposed site suggest that subsurface sediments at the site are fossiliferous and may produce articulated skeletal remains similar to those found in the general area. Based on its research value, the fossil assemblage noted during the surface survey may be considered significant.

5. Based on this determination of potential significance, mitigation measures for paleontological resources are included in Section 5.11 of the Draft EIR/EIS. These measures includes pre-construction collection and examination, monitoring during construction, and collection and examination of fossils unearthed during excavation. Through this method, vertebrate fossil remains as well as any plant, freshwater invertebrate and microfossil remains will be collected and curated for scientific research.

Response 006-6

1. Information to respond to this comment was included in Section 4.1.2.3 of the Supplement. As discussed in this section, a geophysical survey and trenching analysis to verify the presence or absence of active and potential active faults at the proposed site, as requested by the RWQCB, was accomplished by Rail•Cycle (Jacobs, 1993a). This analysis confirmed the findings and conclusion of the previous Phase I and II geologic site characterization investigation that there are no Holocene faults at or trending towards the proposed site.

2. The potential significance of photolineament referenced by this comment (i.e., Lineament A) has been recognized in Section 5.2 of the Draft EIR/EIS and Section 5.1 of the Supplement. The potential that this lineament is fault-related is important as it could impact the proposed landfill (if this lineament is a fault and were to propagate to the north).

3. The information obtained from the geophysical surveys, field reconnaissance, trenching, and review of aerial photographs, as documented in Section 4.1 of the Supplement, support the lack of continuity of Lineament A beneath the site. This conclusion was further supported by the presence of continuous, unbroken later Pleistocene beds within Trenches 1 and 2 (Jacobs, 1993a).

4. Based on subsequent review of Lineament A conducted for this Final EIR/EIS, the possible origins of this lineament were evaluated (Rasmussen, 1994). It was concluded that Lineament A is related to subsidence of the area west of the lineament, most likely due to ground water lowering caused by climatic and environmental changes through geologic time (Rasmussen, 1994). The Rasmussen report cites numerous evidence for Lineament A not being an active fault, concluding that the feature is not an active fault, and, in fact, is not likely a tectonic fault.

Response 006-7

1. Based on modeling conducted by the CLC, the annual recharge of the valley is 20,000 acre feet per year (URS, 1993). The company's estimate of

recharge is also supported by their pumping history in which they have pumped over 30,000 acre-feet of ground water since 1986.

2. Computer modeling was conducted for Rail•Cycle to simulate the impacts of onsite ground water pumping to meet landfill uses (Rust, 1993b). The results of this modeling effort show that only about 0.5 feet of drawdown would occur at the Section 9 well location to support the landfill water requirements. The drawdown cone formed is not expected to contribute to ground settlement beneath the proposed facility.

3. Further analysis of the potential settlement due to ground water withdrawal was included in Section 5.2 of the Supplement. This section summarizes more detailed analysis on the cumulative effects of landfilling and ground water pumping which have been completed subsequent to the Draft EIR/EIS (Jacobs, 1993b). The landfill design accommodates the maximum projected settlement due to subsidence.

Response 006-8

1. It is agreed that the references on Figure 4.2.1 were incorrect. Chapter 1.0 of this Final EIR/EIS includes changes and corrections to the Draft EIR/EIS.

Response 006-9

1. Section 2.6 of the Draft EIR/EIS was provided as a general overview of the legislative and regulatory requirements, in addition to CEQA and NEPA, that must be met by the proposed action. The discussion regarding CCR Title 23, Chapter 15 regarding issuance of WDRs by the RWQCB is an example of the general overview provided. While we agree with this comment that the specific authority granted to the RWQCB for the issuance of WDRs is from the Porter-Cologne Water Quality Act of 1970, CCR Title 23, Chapter 15 is the specific regulatory basis used by the RWQCB to implement the Act. It is in this context that Section 2.6 of the Draft EIR/EIS discussed CCR Title 23, Chapter 15.

2. Regarding the date of the Porter-Cologne Water Quality Act, it is acknowledged that the Act was enacted in 1970 not 1985. Chapter 1.0 of this Final EIR/EIS includes changes and corrections to the Draft EIR/EIS.

Response No. 006-10

1. Section 2.6 of the Draft EIR/EIS provides a general overview of the primary land use regulations or plans with which the proposed action must comply (i.e., Federal Land Policy Management Act, CDCA, and the County General Plan). The California Surface Mining and Reclamation Act (SMARA) is recognized by both the CDCA Plan and the County General Plan in their policies and objectives. It was not deemed necessary to include SMARA in context of the general regulation overview included in Section 2.6 of the Draft EIR/EIS as the proposed action does not directly involve mining. SMARA is discussed in the context of mineral resources and the County General Plan in Section 4.3 of the Draft EIR/EIS.

STATE OF CALIFORNIA
PETE WILSON, *Governor*

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO, CA 95814

JAN 1993
RECEIVED
BY

Jan 08, 1993

KATHLEEN BROWN
SAN BERNARDINO COUNTY PLANNING
385 NORTH ARROWHEAD AVENUE
SAN BERNARDINO, CA 92415-0182

Subject: RAIL-CYCLE
SCH # 91092020

Dear KATHLEEN BROWN:

The State Clearinghouse submitted the above named environmental document to selected state agencies for review. The review period is closed and none of the state agencies have comments. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. ①

Please call Russell Colliau at (916) 445-0613 if you have any questions regarding the environmental review process. When contacting the Clearinghouse in this matter, please use the eight-digit State Clearinghouse number so that we may respond promptly.

Sincerely,

Christine Kinne
Christine Kinne
Acting Deputy Director, Permit Assistance

Post-it™ brand fax transmittal memo 7671 | # of pages ▸

To Randy Scott	From John Loane
Co. San Bernardino	Co. CIWMB
Dept. Planning	Phone # (916) 255-2439
Fax # (909) 387-3223	Fax # (916) 255-2574

State of California

California Environmental Protection Agency

Memorandum

To : Mr. Randy Scott
San Bernardino County
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0182

Date: January 6, 1993

From: John Loane
John Loane, Associate Waste Management Specialist
Facility Review Section
Permitting and Compliance Division
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: SCH #91092020 - Request of the Governor's Office of Planning and Research (State Clearinghouse) for a ninety (90) day environmental review period for the Rail-Cycle Bolo Station Landfill Draft Environmental Impact Report (DEIR), which was assigned a forty-five (45) day review.

In follow-up to our conversation yesterday regarding the 90 day review period requested by your agency; I spoke with Kris Kinne at the State Clearinghouse. Ms. Kinne stated that for a 90 day review period to be stipulated for State Clearinghouse circulation, 90 days must be stated in writing on the Notice of Completion (NOC). Although the NOC submitted by the San Bernardino County Planning Department did stipulate a public review period starting 12-4-92 and ending 3-3-93, it did not contain a specific request for a 90 day review period as provided for by the National Environmental Policy Act (NEPA), and therefore, a 45 day review period was assigned to the above cited proposed project as provided for by the California Environmental Quality Act (CEQA). ②

CIWMB staff requests that the 90 day review period be acknowledged by the State Clearinghouse, and therefore, this request should be submitted by the Lead Agency in writing to the Governor's Office for an extension of the assigned review period for the proposed project. The fax number at the Governor's Office is (916) 323-3018. CIWMB staff appreciates your consideration for this extension to allow for a thorough review of the DEIR as well as the technical documents which were sent directly to the CIWMB for review.

DOCUMENT 007
GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
RESPONSE TO COMMENT

Response 007-1

1. This comment was an administrative letter from the State Clearinghouse to the County that indicates the end of what would have been a typical 45-day public review period under CEQA for the Draft EIR/EIS. Notwithstanding this letter, the Notice of Completion submitted with the Draft EIR/EIS indicated that the review period extended from December 4, 1992 through March 3, 1993. This 90-day public review period was based on specific requirements from the BLM to meet its NEPA process for a proposed action that includes amendment of the CDCA Plan. In addition to the notice of the review period included on the Notice of Completion, the Notice of Availability for the Draft EIR/EIS and the Cover Sheet, both of which where bound in the Draft EIR/EIS, indicated that the document was available for a public review period that would end on March 3, 1993.

2. The County contacted the State Clearinghouse to clarify the administrative interpretation regarding the end of the public review period. According to the County, it was the State Clearinghouse's interpretation that while the Notice of Completion included a public review period from December 4, 1992 through March 3, 1993, that the Notice of Completion did not include a specific request for a 90-day rather than a 45-day review period. Therefore, it was the State Clearinghouse's interpretation that the review period was closed after 45 days.

3. It is the County's interpretation that the review period was clearly noted as continuing through March 3, 1993. The County views the different interpretation between itself and the State Clearinghouse as an administrative issue. No specific requirement was identified by the County or State Clearinghouse to resolve the difference in administrative interpretation.

Response 007-2

1. See Response 007-1. The County discussed this issue with the staff of the CIWMB and informed the staff that the County considered the public review period to continue through March 3, 1993. Based on the County's discussions with the State Clearinghouse regarding the difference in administrative interpretation, the County determined that it was not necessary to submit a specific request to the State Clearinghouse regarding an extension.

008

STATE OF CALIFORNIA PETE WILSON, Governor

STATE LANDS COMMISSION
MINERAL RESOURCES MANAGEMENT DIVISION
245 WEST BROADWAY, SUITE 425
LONG BEACH, CALIFORNIA 90802
TELEPHONE: (310) 590-5201
FACSIMILE: (310) 590-5295

CALIFORNIA RELAY SERVICE
TTD/TT: (800) 735-2929
VOICE: (800) 735-2922

File Ref: W 40687

January 12, 1993

Mr. Garth Morgan
Waste Management of North America, Inc.
9188 Glenoaks Boulevard
Sun Valley, California 91352

Subject: State Mineral Interest Lands
Rail-Cycle Project, Bolo Station Landfill

Dear Mr. Morgan:

The staff of the State Lands Commission (SLC) has reviewed the draft EIR/EIS for the Bolo Station Landfill. The project will involve Section 16, Township 5 North, Range 13 East, SBBM.

Records of the State Lands Commission show that the major portion of this section, some 625 acres, was patented to the National Chloride Company on June 20, 1958, with 100% of the minerals reserved to the State. A strip of land, totaling approximately 14.70 acres along the northern edge of the section, is State fee-owned land subject to a railroad right-of-way lease.

The Bolo Landfill project will adversely affect access to the reserved mineral interest of this section which is owned by the State for the benefit of the State Teachers Retirement System and administered by SLC.

The Bureau of Land Management has classified its lands in Sections 15, 8 and 22, T5N, R13E, SBBM, immediately adjacent to the State section, as being prospectively valuable for sodium minerals and possibly containing commercial quantities of calcium chlorides and sand and gravel. We believe that the same mineral potential exists for the State section and that the landfill project may result in a loss of access to a potential source of revenue to the State Teachers Retirement System. ①

We propose that the State reserved mineral section be evaluated with a similar drilling and sampling program, including at least one test well on the State interest land, as will be conducted by Rail-Cycle on the BLM lands adjoining the State land.

008

Mr. Garth Morgan
January 12, 1993
Page 2 of 2

The results of such an evalution will assist in the determination of whether commercial deposits of minerals exist in Section 16 and procedures which could be used to accomodate the Rail-Cycle and State interests. It may be efficient to consider having the drilling and sampling program conducted concurrently on both Federal and State parcels by the BLM approved contractor. ① CONT.

We would welcome the opportunity to discuss this matter with you at the earliest convenience. You may contact me or Mr. Alex Gonzalez at (310) 590-5201 to arrange for this meeting.

Yours truly,

A. D. WILLARD
Supervising Mineral
Resources Engineer

ADW/AEG/hn/mrmd5

cc: Mr. John Ernster
Rail-Cycle
5770 South Eastern Avenue
Los Angeles, CA 90040

Mr. Henri Bisson
District Manager
Bureau of Land Management
6221 Box Springs Boulevard
Riverside, CA. 92507-0714

DOCUMENT 008
STATE LANDS COMMISSION - JANUARY 12, 1993
RESPONSE TO COMMENTS

Response 008-1

1. Information to respond to this comment was included in Section 4.3.2 of the Supplement. As discussed in this section, upon review of the preliminary mineral resource investigation results conducted by Rail•Cycle (Jacobs, 1991a) the BLM concluded that the southern portion of the proposed landfill site (i.e., Section 22) would be reclassified as valuable for prospecting for calcium chloride, and prospectively valuable for sodium chloride.

2. Based on the above reclassification, the BLM conducted a more detailed investigation into the market for calcium and sodium chloride (Waiwood, 1994). This investigation was made to determine whether there existed, within the proposed site, valuable deposits of calcium and sodium chloride that would be affected by the landfill.

3. Subsequent to preparation of the Draft EIR/EIS, a 500-foot borehole was drilled in the southwest corner of Section 16, at the request of BLM, as part of a supplemental evaluation of mineral potential at the site. Within the area of lakebed sediments sampled in this borehole (i.e., below 390 feet), mineral deposits were limited to several thin zones (less than 10 inches thick) of evaporite mineralization, consisting predominately of calcite and gypsum, encountered within clay layers (Rust, 1993e). Based on the results of the data analyzed from the 500-foot borings, it was concluded that "sustainable, leachable/mineable quantities of ground water are not present for economic development at this location" (Rust, 1993e).

4. The BLM concluded that while the indications of the limited borehole sampling by Rail•Cycle showed a presence of calcium and sodium chloride, a present, valuable commercial operation could not be sustained from limited well yields and low calcium and sodium concentrations from well production at the site (Jacobs, 1991a; Rust, 1993e; Waiwood, 1994). Concentrations of calcium and sodium in the brine/water and well yields would not produce a profitable operation if capitalization and amortization of new solar facilities were required.

5. BLM has concluded that while the proposed site may be prospectively valuable for calcium and sodium mineral resources, there are no known minerals of quantity and quality beneath the proposed landfill site that have a present economic value (Jacobs, 1991a; Rust, 1993e; Waiwood, 1994). Based on this finding, BLM and Rail•Cycle have agreed to value the prospective mineral rights of the proposed exchanged federal lands based on comparable values for minerals from recent private transactions in the area, where minerals of similar prospective value were present.

6. As noted in Sections 4.3.3.1.3 of the Draft EIR/EIS and Section 4.3.2 of the Supplement, the BLM has determined that commercial sand and gravel deposits are not available onsite (Jacobs, 1991a; Rust, 1993e; Waiwood, 1994). The material encountered is an adequate source for common fill and for possible use as cover material for the proposed landfill. A commercial market for aggregates does not exist at the proposed site as adequate resources for the major market, highway construction and maintenance, currently exist at sources closer to the use.

STATE OF CALIFORNIA
PETE WILSON, *Governor*

STATE LANDS COMMISSION
LEO T. McCARTHY, *Lieutenant Governor*
GRAY DAVIS, *Controller*
THOMAS W. HAYES, *Director of Finance*

EXECUTIVE OFFICE
1807 - 13th Street
Sacramento, CA 95814-7187

CHARLES WARREN
Executive Officer

January 19, 1993

File Ref.: W 40687
SD 92-12-07.4

Ms. Carol Whiteside
State Projects Coordinator
The Resources Agency
1416 Ninth Street, Room #449
Sacramento, CA 95814

Mr. Randy Scott
San Bernardino County
Planning Department
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0182

Dear Ms. Whiteside and Mr. Scott:

Staff of the State Lands Commission (SLC) has reviewed the Draft Environmental Impact Report/Statement for the proposed Bolo Station Class III Landfill, SCH #91092020. Based on this review, we offer the following comments.

Shortly after becoming a State, California was granted Sections 16 and 36, or lands in lieu thereof, out of each township then held by the federal government. The lands, classified as "School Lands," were given to the State to help support public education. While many of the School Lands were sold off over the years, the State retains an interest in approximately 1.3 million acres of mostly desert and forest lands. State legislation has mandated that revenues from these school lands accrue to the State Teachers Retirement System. The SLC has jurisdiction and authority over School Lands and lieu lands.

The project area includes Section 16 T5N, R13E, SBM, San Bernardino County, consisting of 14.70 acres of State-owned School Lands subject to a railroad right-of-way and 625.30 acres of State patented School Lands with a 100% mineral interest reserved to the State. Both the fee parcel and the reserved mineral interest are under the jurisdiction of the SLC. ①

Commission staff are presently examining, in detail, the State's interest in relationship to the landfill project, and our office has contacted the project proponent directly in this matter; see attached letter dated January 12, 1993, to Mr. Garth Morgan. ① CONT.

For further information regarding the State's interest in the lands described, please contact Alex Gonzalez at (310) 590-5201.

Sincerely,

Mary Griggs

MARY GRIGGS
Environmental Review Section
Division of Environmental
Planning and Management

Attachment

cc: Dwight E. Sanders
Alex Gonzalez
OPR

DOCUMENT 009
STATE LANDS COMMISSION - JANUARY 19, 1993
RESPONSE TO COMMENTS

Response 009-1

1. This comment addressed the same issues raised in Comment 008. See Response 008-1.

STATE OF CALIFORNIA · CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
PETE WILSON, *Governor*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN • REGION 7
73-720 FRED WARING DR., SUITE 100
PALM DESERT, CA 92260
Phone (619) 346-7491
FAX (619) 341-6820

MAR 01 1993

MAR 1993
REC'D
BY

County of San Bernardino
Planning Department
385 N. Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182

Attn: Mr. Randy Scott

RE: Rail.Cycle-Bolo Station Landfill Project - Draft Environmental Impact Statement and Report (EIS/EIR) State Clearinghouse No. 91092020

We have received and reviewed the draft EIS/EIR dated November 1992 prepared by Environmental Solutions Consultants for the proposed Rail.Cycle-Bolo Station Landfill. The document makes a clear statement of the project scope, potential impacts, and proposed mitigations. Regional Board staff make the following comments for your consideration:

1. 4.4.2.1.3 Ground Water Quality

①

The State Water Resources Control Board (SWRCB) has adopted the "Sources of Drinking Water Policy". (Resolution No. 88-063, adopted May 19, 1988). This policy considers waters of the State with total dissolved solids (TDS) less than 3000 mg/L to be a potential municipal or domestic water supply. Please incorporate this policy into your categorization (see attachment 1) of the ground water beneath the site.

②

2. The following issues are a preliminary description of minimum requirements for a complete application for a Waste Discharge Requirement (WDR) permit to be issued by the Regional Board when CEQA/NEPA is complete. While mandatory for the Report of Waste Discharge (ROWD) application, these issues may be addressed in the CEQA/NEPA process to provide a more complete document:

   A. Information submitted in the ROWD must fulfill the requirements of the California Code of Regulations (CCR) Title 23, Chapter 15 for landfills, including siting, design, construction, monitoring, and closura requirements. Specific alternative designs such as those proposed for the landfill liner system and final cover may be considered if they meet the exemption requirements of Chapter 15.

   B. Ground water and vadose zone monitoring systems must fulfill Article 5 of Chapter 15 including the financial assurance program for a reasonably foreseeable relaase.

② CONT.

   C. Regional Board staff will be concerned with expanded detailed information on the following items as part of the ROWD/WDR permitting process:

      1) Capillary Fringe/Capillary Break portion of the vadose zone in relation to placement of waste.

      2) Collection, containment, and disposal of all wastewaters, including leachate, equipment washwater,etc.

      3) Landfill gas collection system, including ultimate disposal of gas.

      4) Vadose zone gas monitoring system including disposal of gas.

   D. A National Pollutant Discharge Elimination System (NPDES) permit will be required to address Storm Water issues. This federal permit is administered through the Regional Water Quality Control Board.

③

3. The draft EIS/EIR has described potential negative impacts to Cargill-Leslie Salt Division's existing brine solution extraction operation. The Regional Board has a responsibility to protect existing as well as potential beneficial uses of waters of the State from adverse water quality impacts. This concern will be addressed in the WDR permit.

Should you have any questions regarding the subject matter, please call Liann Chavez at (619) 776-8937 or Robert Perdue at (619) 776-8938.

Phil Gruenberg
PHIL GRUENBERG
Executive Officer

LTC/ci

Attachment

cc: Carth Morgan, Rail.Cycle
Karen O'Haire, SCWRCB
Ralph Chandler, CIWMB
Jim Parsons, SWRCB
Region 7 Board Members

File Ref: Working File, Megafills, Railcycle - Bolo Station Landfill

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 88- 63

ADOPTION OF POLICY ENTITLED "SOURCES OF DRINKING WATER"

WHEREAS:

1. California Water Code Section 13140 provides that the State Board shall formulate and adopt State Policy for Water Quality Control; and,
2. California Water Code Section 13240 provides that Water Quality Control Plans "shall conform" to any State Policy for Water Quality Control; and,
3. The Regional Boards can conform the Water Quality Control Plans to this policy by amending the plans to incorporate the policy; and,
4. The State Board must approve any conforming amendments pursuant to Water Code Section 13245; and,
5. "Sources of drinking water" shall be defined in Water Quality Control Plans as those water bodies with beneficial uses designated as suitable, or potentially suitable, for municipal or domestic water supply (MUN); and,
6. The Water Quality Control Plans do not provide sufficient detail in the description of water bodies designated MUN to judge clearly what is, or is not, a source of drinking water for various purposes.

THEREFORE BE IT RESOLVED:

All surface and ground waters of the State are considered to be suitable, or potentially suitable, for municipal or domestic water supply and should be so designated by the Regional Boards[1] with the exception of:

1. Surface and ground waters where:

    a. The total dissolved solids (TDS) exceed 3,000 mg/L (5,000 uS/cm, electrical conductivity) and it is not reasonably expected by Regional Boards to supply a public water system, or

    b. There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices, or

    c. The water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day.

2. Surface waters where:

    a. The water is in systems designed or modified to collect or treat municipal or industrial wastewaters, process waters, mining wastewaters, or storm water runoff, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards; or,

    b. The water is in systems designed or modified for the primary purpose of conveying or holding agricultural drainage waters, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards.

3. Ground water where:

    The aquifer is regulated as a geothermal energy producing source or has been exempted administratively pursuant to 40 Code of Federal Regulations, Section 146.4 for the purpose of underground injection of fluids associated with the production of hydrocarbon or geothermal energy, provided that these fluids do not constitute a hazardous waste under 40 CFR, Section 261.3.

4. Regional Board Authority to Amend Use Designations:

    Any body of water which has a current specific designation previously assigned to it by a Regional Board in Water Quality Control Plans may retain that designation at the Regional Board's discretion. Where a body of water is not currently designated as MUN but, in the opinion of a Regional Board, is presently or potentially suitable for MUN, the Regional Board shall include MUN in the beneficial use designation.

The Regional Boards shall also assure that the beneficial uses of municipal and domestic supply are designated for protection wherever those uses are presently being attained, and assure that any changes in beneficial use designations for waters of the State are consistent with all applicable regulations adopted by the Environmental Protection Agency.

The Regional Boards shall review and revise the Water Quality Control Plans to incorporate this policy.

---

[1] This policy does not affect any determination of what is a potential source of drinking water for the limited purposes of maintaining a surface impoundment after June 30, 1988, pursuant to Section 25208.4 of the Health and Safety Code.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a policy duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 19, 1988.

Maureen Marché

Maureen Marche'
Administrative Assistant to the Board

DOCUMENT 010
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN DISTRICT
RESPONSE TO COMMENTS

Response 010-1

1. Section 4.2 of the Supplement detailed the characterization of the site in relation to the referenced "Sources of Drinking Water Policy" noted in this comment.

Response 010-2

1. As acknowledged by this comment, more detailed information than required for CEQA and NEPA will be required for the Report of Waste Discharge (ROWD) and WDRs application to be deemed complete. Information included in this comment from the RWQCB was discussed in various levels of detail, primarily in several sections of Chapter 3.0 of the Draft EIR/EIS. Revised or clarified information on several of the topics was provided in the Supplement.

2. Rail•Cycle has indicated that the level of detail required will be provided at the appropriate time for the proposed project. RWQCB's understanding of the difference between the level of details required for the EIR/EIS and that required for the ROWD and for the application for the WDRs, is acknowledged and appreciated.

Response 010-3

1. Numerous studies have been conducted since the distribution of the Draft EIR/EIS to further characterize the site and to analyze the project's potential to adversely impact Cargill's brine production operation. The results and conclusions of these studies were included in Chapters 4.0 and 5.0 of the Supplement.

2. Rail•Cycle recognizes the RWQCB's responsibility to protect waters of the state, and will provide the full analysis to the level of detail as required for the WDR permit.

State of California

California Environmental
Protection Agency

RECEIVED
MAR 1993
BY

MEMORANDUM

To: Russ Colliau
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

Randy Scott
San Bernardino County Planning Dept.
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0180

Date: March 3, 1993

From: Bernard R. Vlach
Acting Supervisor, Facility Evaluation Section
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Lorraine Van Kekerix, Manager
Waste Generation Analysis & Environmental Review Branch
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: SCH #91092020 - DRAFT ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL IMPACT STATEMENT (DEIR/EIS) FOR THE CONSTRUCTION AND OPERATION OF THE RAIL•CYCLE - BOLO STATION LANDFILL (BSL), REQUIRING ISSUANCE OF A SOLID WASTE FACILITIES PERMIT (SWFP), SAN BERNARDINO COUNTY AND UNITED STATES DEPARTMENT OF THE INTERIOR/BUREAU OF LAND MANAGEMENT

California Integrated Waste Management Board (CIWMB) staff have reviewed the DEIR/EIS for the project cited above and have prepared the following comments. The Board has two complementary mandates: to ensure that solid waste facilities are designed and operated in a an environmentally sound manner which protects human health and the environment in accordance with applicable laws [Public Resources Code (PRC) Section 40052]; and to oversee local jurisdictions achievement of the waste diversion mandates of 25% by 1995 and 50% by 2000 (PRC Sections 40001, 40051 and 41780). The Board staff comments focus on solid waste management and achievement of the Board mandates [California Environmental Quality Act (CEQA) Guidelines, section 15205 (c)]. Please address the comments in the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS).

Project Description

The proposed project is a private venture between Atchison, Topeka, and Santa Fe Railway Company, Inc. (ATSF) and Waste Management of North America, Inc. for the construction and operation of the Rail Cycle - Bolo Station Landfill which includes rail transport of nonhazardous municipal solid waste from material recovery facilities (MRFs) to be located in various southern California cities and counties, and establishment of a large capacity (2,100 acre), long-term (60 to 100 years), Class III landfill facility. Rail Cycle has not included the MRFs as part of the proposed action and proposes to evaluate MRFs separately. The landfill is proposed at a site known as Bolo Station in a rural area of the Mojave Desert near the community of Amboy in San Bernardino County.

The County of San Bernardino Planning Department (SBPD) coordinated with the Bureau of Land Management (BLM) in the preparation of a DEIR/EIS for the project cited above because the proposed action includes the exchange of federal lands managed by BLM, an amendment of the California Desert Conservation Area Plan, and right-of-ways across federal lands. The project would also consist of a General Plan Amendment and issuance of a Conditional Use Permit through the County of San Bernardino. SBPD is the Lead Agency in preparing the DEIR/EIS with the BLM conducting the public scoping meetings in connection with the preparation of the EIS pursuant to the National Environmental Policy Act (NEPA).

The proposed facility would be located on 4,800 acres (3,200 acres are owned by ATSF) in the Mojave Desert between the communities of Amboy and Cadiz directly adjacent to Bristol Dry Lake and Leslie Salt in Sections 5, 8, 9, 15, 16, 17, 21, and the west half of Section 22 in Township 5 North, Range 13 East, San Bernardino Baseline and Meridian. The proposed facility will be open 24 hours per day, seven days per week, for 358 days during the year.

Waste would be transported by rail from various materials recovery facilities (MRFs), located in cities and/or counties in southern California, within sealed 40- to 45-foot containers (using existing rail lines) to the proposed BSL. Each train will carry approximately 3,000 tons of compacted MSW in intermodal-type containers. Typically 100 to 120 containers, each carrying approximately 25 to 30 tons of waste, will be loaded on a conventional double-stack, approximately 4,000-foot long train. The system is to provide service transporting seven trains per day in the initial operation and would begin with 3,000 tpd The maximum disposal rate increasing to the proposed 21,000 tpd within five to seven years is expected when seven MRFs are included within the system, each requiring a single train to the landfill daily; up to seven inbound trains.

The proposed facility would have a landfill footprint constructed in a "T" shape consisting of 2,100 acres and would have an anticipated life expectancy of between 60 to 100 years. The estimated conceptual capacity of the proposed landfill is approximately 821 million cubic yards (mcy), of this total, the waste volume is projected to be 717 mcy or 430 million tons of MSW. The central portion of the landfill will be elevated from approximately 370 to 380 feet above the surrounding natural terrain. Excavation depth will vary across the landfill site in order to achieve and maintain a minimum separation of 5 feet between the base of the landfill liner and the highest anticipated zone of capillary rise above ground water level. The landfill "footprint" design includes division of the 3.3-square mile surface area into 46 landfill cells along a north-south grid. Each landfill cell will be excavated at a 3:1 (horizontal to vertical) cut slope. The landfill cells will be filled with compacted waste placed in lifts ranging from 15 to 20 feet thick. Each cell will be sequentially prepared and filled with its optimum waste and cover. The working face is expected to be approximately 300 feet wide for the 3,000 tpd operation and would increase over time in relationship to the daily volume of waste deposited to approximately 600 feet wide at the 21,000 tpd operation. The maximum side slope at the landfill edges will be 3:1. The project proponent proposes to use performance standards to conserve cover material at the proposed landfill.

Issues identified through the scoping process and evaluated in the DEIR/EIS include geology and soils, mineral resources, surface hydrology and ground water, vegetation, wildlife, air quality, public health and safety, visual resources, cultural and paleontological resources, transportation, noise, land use, and socioeconomics. However, with implementation of the mitigation

measures identified in the DEIR/EIS, the following impacts would remain significant and unavoidable even after mitigation:

- Ground water supply
- Air quality
- Visual Resources
- Land use
- Socioeconomics

The DEIR/EIS analyzes the environmental consequences of the proposed action as well as the consequences of the reasonable and feasible alternatives to the proposed action. The level of environmental analysis is to allow the public, responsible and reviewing agencies, and decision-makers sufficient information to make an informed decision on the proposed action and its alternatives. Alternatives to the proposed project include:

- Cadiz Valley
- Reduced Action
- No Action

Federal Regulations

The Resource Conservation and Recovery Act, Subtitle D, promulgated new regulations in 40 Code of Federal Regulations (CFR), Part 258, for municipal solid waste landfills. The DEIR/EIS briefly discusses the impacts of 40 CFR Part 258 upon the proposed project in Section 2.6.3.4.

Please be aware that the following federal regulations may affect implementation of the proposed project after October 9, 1993:

①

Subpart B;	Part 258.11	- 100 Year Floodplain
	Part 258.14	- Seismic Impact Zones
	Part 258.16	- Closure of Existing Units (Floodplain)
	Part 258.40	- Design Criteria (Point of Compliance)
	Part 258.40	- Design Criteria (Composite Liner Components)
	Part 258.40	- Design Criteria (Leachate Collection System)
Subpart C;	Part 258.21	- Cover Material Requirements

Minimum Separation of Wastes from Groundwater and the Effects of Settlement

Staff's primary concerns relate to the issues of consolidation of the native materials in the southern portion of the proposed facility and the effect this settlement would have on the proposed liner/leachate recovery system and the hydrogeology of the area. Section 5.2.1.2.1.1 indicates that long term ground settlement could range from 1 to 14 feet with the greater amounts of settlement occurring in the southern portion of the proposed facility. Section 5.2.1.2.1.5 gives an example of differential settlement between cells and estimates 4 feet of settlement over a distance of 850 feet, which would not impact the environmental control systems (liner, LCRS, landfill gas collection system). Is this a worst case estimate based on 14 feet of settlement? If not, larger amounts of settlement could impact the integrity of the environmental control systems. Additional information including estimates of the location and magnitude of the potential settlement would be needed to evaluate the impact of the settlement on the environmental control systems. This more detailed information may be forthcoming in the report of waste discharge or the permitting documents. There is not enough information provided to determine the effects of consolidation on the hydrogeological regime and the three brine wells used by Leslie Salt. Again more detailed information may be contained in the report of waste discharge. ②

The estimated highest ground water table values in Table 4.4.5 appear to be based on water level measurements taken in April 1991. These estimates should be based on historic water level information for the area if it is available - not just a single monitoring event during a drought period. ③

In section 5.2.1.2.1.4 the document states "Title 23 Chapter 15 requires a minimum separation of 5 feet between waste and underlying ground water, even after settlement occurs. Therefore, the original depth of excavation must take into account the anticipated maximum long term settlement. To accomplish this, the original excavation will maintain a 5 foot buffer between wastes and the capillary zone. The capillary zone extends a maximum of 9 feet above the ground water level (Metcalf and Eddy, 1992)." The five foot buffer plus a nine foot capillary zone (maximum) amounts to a maximum separation of 14 feet between wastes and the water ④

table. In a worst case situation, with a maximum estimated settlement of 14 feet (section 5.2.1.2.1.1), this would indicate a potential for the separation between the base of the wastes and the water table to be less than the required five feet and possibly nonexistent. If the capillary zone is less than nine feet thick, then settlement could allow the base of the excavation to drop below the water table in a worst case situation. Even though the proposed facility is lined, it is not a good idea to design a facility such that the water table could exert pressure on the liner. ④ CONT.

Section 4.4.2.2.1.2 on page 4.4-27 of the DEIR/EIS states that Based on monitoring well data, depth to ground water ranges from 195 feet below the ground surface at the northern part of the site, to approximately 37 feet below ground surface at the southern part of the site. The latter depths are dependent on the cone of depression caused by the Leslie Salt brine pumping wells. ⑤ Existing ground water elevations are listed in Table 4.4.5,..." and site a study by "Jacobs, 1991b." on page 4.4-29. CIWMB staff requests that this study be included with the FEIR/EIS. ⑥

100 Year/24-hour Storm Event

There is some justification for concern over the proximity of the proposed "footprint" to Bristol Dry Lake. Should a 100 year/24-hour storm event occur after Leslie Salt has stopped pumping from their extraction wells, a new historical high water table in this area would be established. Because the site is expected to operate for up to 100 years, a study should be undertaken to predict the highest groundwater elevations in the southern part of the "footprint" as well as the highest anticipated flood level from a 100 year/24-hour storm event in the worst case scenario. This would ensure that the proposed landfill would maintain a minimum of 5 feet above the ground water table and that flood waters would be mitigated for in the FEIR/EIS. CIWMB staff requests that the Lead Agency make Section 5.4.1.1.3.2 a mitigation measure in Section 5.4.5.1. ⑦

Where will the proposed sedimentation basin(s) be located at the proposed facility? ⑧ Why does the mitigation for use of a sedimentation basin for the proposed project not incorporate design for a 100-year, 24-hour storm event; as was discussed in the body of the DEIR/EIS and as is proposed for the Cadiz Valley alternative site? ⑨

Section 3.3.2.1.4.1 on page 3-41 of the DEIR/EIS states that "Stormwater will be managed with temporary and permanent diversion ditches and retention ponds. The size of diversion ditches and retention ponds will be designed during the permitting phase of the project. Sizing of the systems will be for a 25-year, 24-hour storm event." The proposed facility will have an estimated lifetime of between 60 to 100 years. It is probable that a storm of a greater magnitude than 25-year, 24-hour event will occur during the operation of this facility as proposed. ⑨ CONT.

Clay Materials for Liner Construction and Cover Material

Section 5.8.1.1.5.6 of the DEIR/EIS states that "The working face would not be left unexposed overnight and would be further restricted during high winds." Daily cover material has been proposed as mitigation in the DEIR/EIS for several potential impacts such as nuisance controls in Section 5.8.5. What is the estimate for existing clay materials at the BSL site that could be used for construction of the clay liner, daily and intermediate cover, and final capping material? How much clay will be required for construction of the clay liner, daily and intermediate, and final cap? ⑩ Section 4.2.1.2.7 of the DEIR/EIS states that "It is unlikely that these types of sediments [detrital mud/silt and clay] directly underlie either of the sites [project or alternative], although it is possible that they could exist at depth (Jacobs, 1990c)." Section 4.2.2.1.2.2 states that "Although not noted in the boring logs, lacustrine deposits may exist at depth below the site, based on the proximity of Bristol Lake." If excavation of clay is necessary to go below the groundwater table, further CEQA analysis and review would be required. ⑪

Analysis provided in Section 5.12 of the DEIR/EIS states that "Approximately 250,000 cubic yards of clay would be required every one to two years. This amount of clay would require an additional 80 trucks per day to enter the site over a six-month period, six days per week."

Section 3.3.2.1.4.2 on page 3-33 of the DEIR/EIS states that "Geotechnical investigations currently underway may locate onsite areas of suitable clay materials (i.e., a permeability of 1 x 10^{-7} cm/sec or less) for the 3-foot thick compacted clay layer, and gravel for the drainage layer. If these materials are not found onsite, or, if found, but not ⑫

---

in sufficient quantity to meet project requirements, the currently permitted Rheox Mine near Hector, California, has been identified as a source of clay that would be able to provide the approximate 13.5 million cubic yards of clay required for the landfill."

If importation of greater than 250,000 cubic yards (cy) of clay material is required for the proposed project during a six-month period, further analysis and documentation may be required. ⑫ CONT.

Proposed Liner

A concern relates to the placement of a composite liner on the 3:1 side slopes of the proposed landfill cells. The stability of such a liner system will need to be evaluated based on the material properties of the various components and their interactions. This issue should at least be mentioned in the EIR although it would not have to be resolved until the permit stage of the process has been reached. ⑬

Discuss the probability for the proposed landfill liner and the alternate landfill liner systems for leakage of leachate. ⑭

Leachate Management

The DEIR/EIS proposes that leachate generated at the site will be either recycled back into the landfill or piped into evaporation ponds. The DEIR/EIS does not propose any analysis for the recycling of leachate back into the active landfill face as that activity could impact the generation of landfill gas and increase the amount of leachate generation. How many gallons of leachate will be generated for the duration of the proposed project (60 to 100 years)? What is the capacity of the proposed LCRS and how would the recycling of leachate impact the ability of the LCRS to manage leachate generation? ⑮

Leachate and landfill gas condensate have the potential to contain volatile organic compounds (VOCs). The emission of toxic VOCs is a significant environmental impact. Both proposed handling procedures will result in toxic VOCs being emitted directly into the atmosphere. The DEIR/EIS does not discuss using available control technology to lessen their impact on the environment. Specifically, the DEIR/EIS does ⑯ not propose stripping VOCs from the leachate generated at the site, nor does it describe how landfill gas condensate will be handled. Currently, many large landfills utilize air strippers to extract VOCs from leachate and landfill gas condensate. The VOCs are then introduced into a flare system where they are destroyed. This method for handling leachate and landfill gas condensate is preferable than to vent VOCs directly into the atmosphere unattenuated. ⑯ CONT.

Where will the leachate evaporation ponds be located at the facility? These ponds will require further CEQA analysis and review upon consideration. ⑰

Operational Issues

The cover frequency is not specified in the EIR except to say that it will be daily. If the site is to receive up to 21000 TPD and operate on a 24 hour basis, a cover frequency proportionate to the size of the waste cell should be utilized to minimize the total area of exposed waste. This would require the operator to cover once a cell has reached a certain size. It is recommended that a study be performed to determine the optimum size for a waste cell that will minimize infiltration, VOC emissions, and off-site litter transport. ⑱

The DEIR/EIS alludes to the possibility of using an alternative form of cover. Currently, this would require a demonstration project be proposed and approved by the CIWMB to ensure that the alternative cover meets all the standards for a suitable cover material. The DEIR/EIS only discusses obtaining approval from the CRWQCB. ⑲

The proposed length of the working face (approximately 600 feet) may be unmanageable in a desert environment. Turbulent and/or gusting wind conditions blowing over small sites located in the desert have created problems by transporting litter considerable distances off-site. Litter fencing alone will not help to prevent litter from blowing off-site. Restricting the size of the working face in conjunction with the strategic placement of litter fencing is recommended to minimize this problem. ⑳

How many landfill flares will be installed at the proposed landfill and where? ㉑

Seismicity

Please include a map of historic earthquake epicenters within a five mile radius of the proposed landfills. ㉒

Noise

What is the estimated Ld_{max} at the proposed perimeter boundary for the landfill during full operation (i.e. 21,000 tpd). ㉓

On-site Well(s)

The DEIR/EIS discusses use on one well located at the northern boundary for the operation of the proposed facility. However, Section 5.15.1.5.2.1 on page 5.15-12 of the DEIR/EIS states "In the project area, water for landfill operations would be supplied from two new onsite wells." Where will these new wells be located, and how will there operation impact the overdraft conditions in the Bristol Basin? ㉔

Glare from Lighting

What impacts to Highway 66 from light and glare will there be during night operations? ㉕

Receptors

What is the distance to the nearest residential and commercial/industrial receptors for noise, odor, litter and dust? What will be done in the event that complaints are lodged against the operator due to excessive noise, odor, litter and/or dust? ㉖

Calcium chloride is in abundance in the project area and "is used for dust control processes due to its ability to retard the evaporation of water, which is important in arid climates (Majmundar, 1985a)." Will calcium chloride be used to control dust at the proposed facility? ㉗

Hazardous Waste Collection

Describe the on-site hazardous waste storage facility and containment as well as the proposed location. ㉘

Landfill Phased Closure

How will phased closure of the landfill cells abut each other at the interface in order to be incorporated into a unified landform? ㉙

Fire Protection

Will any fire hydrants be located on-site and where? How will adequate pressure be maintained in these fire hydrants, if any? Will all landfill equipment be required to carry fire extinguishers? ㉚

Public Drop-Off Facility

Section 3.3.2.5.1 states that the public drop-off facility "...will consist of an asphalt pad and roll-off containers..." Describe the proposed containment, protection from precipitation, and whether any materials will be removed from the waste and how. Where and how will recovered materials be stored? ㉛

Rail Haul

Will the on-site rail car offloading facility have a containment for surface runoff collection? ㉜

How many bridges will the MSW trains cross/go under enroute to the proposed facility? What is the maximum height for rail car passage at the lowest undercrossing? What is the maximum height of a fully loaded, double-stacked rail car? What is the current condition of the tracks on the proposed rail route to the proposed landfill site? ㉝

How much methane could be generated in the sealed MSW containers during the maximum transport duration? Will this gas be vented? If the gas is not vented, what protections will be necessary to prevent "risk of upset" conditions both during transport, off-loading, and unloading (disposal)? ㉞

Infrastructure

Discuss the potential impacts in the unlikely event of a workforce strike at the ATSF, which could interrupt rail service to the proposed facility for longer than 48 hours. ㉟

How could the infrastructure be impacted if trucks were used to transport the waste to the proposed BSL, which could create approximately 800 truck trips per day. ㉟ CONT.

Mineral Rights

Section 4.3.1.5 states that "Federal mineral management policy is mandated in various legislation,..." Will BLM retain mineral rights at the proposed landfill sites? ㊱

Alternatives to the Proposed Project

The CEQA Guidelines require that an EIR address alternatives to the proposed project (CEQA Guidelines Section 15126). Specifically, the Guidelines require an applicant to:

> "...(d)... Describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, and evaluate the comparative merits of the alternatives....
>
> > (3) The discussion of alternatives shall focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. ..."

Section 3.7.1 on page 3-63 of the DEIR/EIS states that "This EIR/EIS not only analyzes the environmental consequences of the proposed action, but also the consequences of the reasonable and feasible alternatives to the proposed action. The level of analysis in the EIR/EIS is sufficient to allow the public, responsible and reviewing agencies, and decision makers to make informed decisions on the environmental consequences of the proposed action and its alternatives."

CIWMB staff feels that the level of analysis of alternative sites should be increased and offers the following in support of this. Section 4.4.2.2.2.1 of the DEIR/EIS states that "Very few wells have been drilled within the Cadiz Basin, and no wells have been drilled within the boundaries of the alternative site. Characterization of the ground water underlying the site is, therefore, only presented in general terms." This level of site analysis seems sketchy ㊲ for a proposed project alternative at Cadiz Valley. Please respond with your feelings on this issue. (37) CONT.

Staff believes the alternatives analysis in the DEIR/EIS needs to be expanded to include an analysis of the use of additional local, regional and statewide diversion programs, including increasing recovery of recyclables at MRFs in urban portions of southern California, to reduce the need for additional landfill capacity. Such an alternative could reduce environmental impacts caused by construction and operation of the landfill and use of the rail lines. It would also assist jurisdictions to achieve the 25% and 50% IWMA diversion mandates. Please revise the alternatives analysis to include an analysis of the use of additional diversion programs to reduce the need for additional landfill capacity. (38)

Significant Unavoidable Environmental Impacts

The DEIR identified specific significant environmental impacts which cannot be mitigated or avoided under the proposed projects' scenario pertaining to ground water supply, air quality, visual resources, land use, and socioeconomics. (39)

CEQA Guidelines, Article 7, Section 15091(a), states:

> "No public agency shall approve or carry out a project for which an EIR has been completed which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding."

Please send staff a copy of the written statement of facts supporting each finding once it is adopted.

Mitigation Reporting or Monitoring Program (MRMP)

As required by Public Resources Code Section 21081.6, the Lead Agency should submit a MRMP at the time of local certification of the FEIR/EIS. This should identify the impacts associated with the proposed project, identify mitigation measures to reduce impacts to a less than significant level, identify agencies responsible for (40)

ensuring the implementation of the proposed mitigations, and identify a monitoring/tracking mechanism. (40) CONT.

CIWMB staff requests that the Lead Agency send a copy of the MRMP to the CIWMB.

Impact of the Proposed Project on Achieving Waste Reduction Mandates within the Service Area

Because the proposed project could have significant impacts and effects on local government's solid waste management plans and their ability to meet the mandates of the Integrated Waste Management Act (IWMA), Board staff believes that the impacts of the proposed project should be examined in the FEIR/EIS (CEQA Guidelines Section 15125).

The IWMA requires local government agencies to achieve a 25 percent reduction of waste disposed at solid waste facilities by January 1995 and a 50 percent reduction by January 2000 [Public Resources Code (PRC) 41780]. The waste management planning documents [Source Reduction and Recycling Elements (SRREs)] prepared and submitted to the Board to date do not address the proposed project or how the proposed project would impact the diversion programs identified in the SRREs.

The diversion programs selected by local government agencies are required to be consistent with the waste management hierarchy outlined in PRC 40051. PRC 40051 requires the State and local agencies to promote waste management practices in an order of priority: (1) source reduction; (2) recycling and composting; (3) and the environmentally safe transformation and safe land disposal. In addition, the State and local agencies are to maximize the use of all feasible source reduction, recycling and composting options in order to reduce the amount of solid waste that must be disposed of by transformation and land disposal. If the mandated goals are not accomplished, local governments may be liable to an imposition of civil penalties of up to $10,000 per day. At the time of the consideration of a permit to operate for the facility, the CIWMB will determine if the record contains substantial evidence that the proposed project would impair or impede the achievement of waste diversion goals in PRC 41780. (41)

Section 2.1 indicates that the stated purpose and need for the proposed project is to meet part of the projected demand for landfill space necessary to support various cities and counties in southern California; to provide long-term landfill capacity in a rural desert setting; to provide additional landfill space not restricted to southern California but to other solid waste management agencies throughout the state as well as the remainder of the country.

Please discuss how this project would impact the local, regional and statewide diversion programs planned to be implemented by the jurisdictions that may use this facility and the achievement of the IWMA diversion mandates.

Based on the information presented in: ㊶ CONT.

- Table 3.2 which states that total recovery of recyclables at MRFs will be 28%;
- page 3-7 which states that green waste will be handled at MRFs or facilities other than Bolo Station; and
- pages 3-13 and 3-51 which state that the majority of recycling will be completed prior to transport to Bolo Station;

staff believes diversion activities and recovery of recyclable materials may be limited. Please discuss the recyclable recovery rates and the potential for jurisdictions not achieving the 25% and 50% diversion mandates of the IWMA.

Potential for Economic Effects on the Solid Waste Management System of San Bernardino County to Impact Achievement of Diversion Mandates

Page 5.15-13 of the DEIR/EIS states the County is expecting the revenues that would be collected as landfill tipping fees at Bolo Station. However, the proposed project could result in costs to the County's solid waste management system. Many of the costs are funded through tipping fees. As long as the amount of solid waste requiring landfilling remains relatively consistent with the anticipated projected volumes, sufficient funds will be collected to offset identified costs. If solid waste volumes decrease, a deficit could develop. ㊷

The project envisions various MRFs throughout southern California, including San Bernardino County (County). If cities in the County agree to a MRF, then wastes currently

disposed at County-owned landfills could be diverted to the proposed Bolo Station landfill.

The County generates approximately 5,000 tons per day of solid waste. Rail Cycle MRFs will have a daily capacity of 3,000 to 4,500 tons per day. The location of a single MRF in the County could potentially divert 60 to 90 percent of the total solid waste requiring landfilling in the County.

Diversion of a high percentage of recyclables could have a significant adverse impact on the County's ability to fund its solid waste management system as it relies on a long-term, established revenue base. Staff is concerned that if significant diversion reduces revenues generated by tipping fees at Bolo Station landfill, the County would be faced with a number of choices to make up lost revenues, including, but not limited to: ㊷ CONT.

a) Importation of waste;
b) Increased tipping fees; or
c) Not implementing all feasible source reduction, recycling and composting programs.

Please discuss the impacts of reduced tipping fees from implementation of source reduction, recycling and composting programs would have on jurisdictions achievement of the mandates of the IWMA.

Effects of Additional Solid Waste Generated in Rural Communities and Potential Impacts on Achievement of the Waste Diversion Mandates

Section 5.15.1.4.2 indicates that the solid waste generated by new project-related population in the Morongo Basin would represent an incremental increase to the existing waste stream. The solid waste would likely be disposed of at the Landers or Twentynine Palms landfills and would incrementally contribute to increasing fill rates. ㊸

Please discuss the diversion activities planned to be implemented at the landfill and the impact on the rural desert communities' ability to achieve the mandated diversion goals if additional solid waste is generated and disposed in these communities.

Scope of Project EIR/EIS

CEQA requires an evaluation of the entire project and its environmental impacts at the decision-making phase [CEQA Guidelines Sections 15378 (a), 15002, 15161 and 15165]. Board staff believe the whole project includes the seven MRFs (intermodals), an unknown number of transfer stations and the rail lines and rail cars required for transportation of materials from the MRFs and transfer stations to the facility as described on pages 1-1, 1-5, 3-4, 3-7, and 3-9.

Several proponents have already prepared environmental impact reports for intermodal facilities, providing some of the necessary infrastructure for the entire project. Please identify these facilities in the FEIR/EIS. (44)

Staff believes that, although the exact locations of future facilities are unknown at this time, the FEIR/EIS should, at a minimum, provide a generic, but complete, assessment of the environmental impacts and mitigations associated with the processing, at the MRFs and transfer stations, and transport of wastes to the proposed landfill. Subsequent environmental reviews for specific processing facilities could incorporate information found in the FEIR/EIS by reference, if appropriate. Please address the environmental impacts and mitigations associated with the entire waste management project from the point(s) of waste processing, transfer, rail transport and ultimately, disposal in the FEIR/EIS.

Thank you for the opportunity to review this document. If you have any questions regarding these comments, please contact Bernie Vlach at (916) 255-2460 or John Loane at (916) 255-2439 regarding landfill siting comments, or Lorraine Van Kekerix at (916) 255-2330 regarding waste diversion comments.

DOCUMENT 011
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD RESPONSE TO COMMENTS

Response 011-1

1. As discussed in Section 2.6.3.4 of the Draft EIR/EIS, Subtitle D requirements will apply to the proposed Bolo Station Landfill. Rail•Cycle, as the applicant, is also aware of the various requirements and effective date of Subtitle D as it relates to the design, construction, operation, closure and postclosure of the proposed landfill.

Response 011-2

1. Information that responds to this comment was included in the Supplement. Based on additional soil analysis conducted subsequent to the distribution of the Draft EIR/EIS (see Sections 4.1 and 5.1 of the Supplement), the soils underlying the site can be classified as "over-consolidated" instead of "normally to slightly over-consolidated" as determined by the earlier study (Jacobs, 1993b). The information in the Supplement represents a conservative analysis of settlement based on the best available for environmental review. As noted by this comment, additional information of greater detail may be required by the RWQCB as part of its consideration of Rail•Cycle's application for the landfill WDRs, or by the LEA and CIWMB as part of the application for the SWFP.

2. Section 5.3 of the Supplement provided refined analysis of the potential effects of consolidation and ground water pumping on both the quality and quantity on the brine wells operated by the Cargill Salt Company (Cargill).

Response 011-3

1. There is no known historical information as to ground water levels in the Bristol Basin. The effects of a 100-year, 24-hour storm event and the maximum rise in the ground water table due to cessation of ground water pumping for brine production have been considered to determine the required separation between wastes and the water table (see Sections 4.2 and 5.2 of the Supplement).

Response 011-4

1. Information to respond to this comment was included in the Supplement. As described in Section 5.2 of the Supplement, the base grades for the landfill have been designed to account for the maximum settlement of 15.6 feet due to both ground water pumping and landfilling, the estimated 9 foot capillary zone, and the maximum potential rise in the water table (due to both a 100-year, 24-hour storm and the cessation of Cargill pumping).

2. As shown in Figure 5.2.1 of the Supplement, the maximum required separation between the base of the landfill and the highest anticipated water table is 29.6 feet. The most conservative settlement condition would occur in the southwest corner of the site. The 29.6 feet of separation between the landfill liner and ground water capillary zone would be achieved under all conditions. At the lowest elevation of landfill construction, in the vicinity of leachate collection sumps, capillary rise would be limited by construction of an engineered break consisting of a layer of permeable gravel or geonet. All landfill liner construction would occur 5 feet above this engineered break or above the assumed 9-foot natural rise. Due to the varying ground water depth and soils conditions across the proposed site, the design level of excavation would also vary (i.e., excavation depth would be designed to maintain the required separation based on predicted settlement and ground water rise at specific locations across the site).

Response 011-5

1. As noted in the previous comment, the design separation between the ground water table and the base of the landfill would include an allowance for the maximum possible rise in the water table due to cessation of pumping at the Cargill wells. Figure 4.2.1 of the Supplement depicted the measured ground water contours, based on data collected while the brine wells were pumping (i.e., reflecting the cone of depression). The estimated water table rise due to cessation of pumping was based on the difference between the contours depicted in Figure 4.2.1 of the Supplement and Figure 4.4.10 of the Draft EIR/EIS.

Response 011-6

1. The document requested by this comment (*Phase II: Geologic, Hydrogeologic and Geotechnical Site Characterization Study* [Jacobs, 1991]) was provided to the CIWMB, RWQCB, and other agencies by Rail•Cycle prior to the distribution of the Draft EIR/EIS. Additional technical reports have been and will be provided to regulatory agencies, including the CIWMB, as part of the permitting process for the proposed landfill.

2. Chapter 12.0 of the Draft EIR/EIS and Chapter 11.0 of the Supplement included a list of the various technical reports prepared by Rail•Cycle and utilized to address potential impacts of the proposed action. Together, these reports constitute a small library of materials (i.e., over 2,500 pages). As stated in the Draft EIR/EIS and Supplement, these reports are available for public review at the County Planning Department and the BLM-California Desert District.

3. By making copies of the technical reports available at the County and BLM, these reports are considered to be available for public review (Section 21061 of the Public Resources Code). Information that is available for public review is not required by CEQA to be repeated in its entirety in an EIR (Section 21061 of the Public Resources Code). Including the findings of the various geotechnical reports and other technical reports on other topics in the EIR/EIS, and making these reports available to specific agencies and the public for review meets the intent of CEQA and NEPA. It also balances the need to provide information on impacts of the proposed action in a concise document with the potential cost of reproducing and distributing several thousand pages, which only a limited number of commenters may wish to review.

4. Based on the above, there is no need or requirement to include the document referenced by this comment in the Final EIR/EIS.

Response 011-7

1. As specified in Response 011-4, the minimum separation between the waste and the ground water table takes into account the estimated rise in the water table due to a 100-year, 24-hour storm, as well as, the maximum estimated rise due to cessation of brine pumping by Cargill.

2. The design of the landfill has been refined to exclude the majority of the areas previously within the 100-year floodplain. A mitigation measure requiring that the remaining portions of the landfill footprint, which are located within the floodplain boundary, be protected by means of engineered berms was included in Section 5.2.2 of the Supplement.

Response 011-8

1. Information to respond to this comment was included in the Supplement. As shown in Figure 3.1 of the Supplement, under the refined site plan, sedimentation ponds are planned to be constructed within the buffer zone at the southwest corner of Section 17 and the southwest corner of Section 21. These facilities, as well as other stormwater run-on and runoff control structures would be designed for the 100-year, 24-hour storm.

Response 011-9

1. Information to respond to this comment was included in the Supplement. To clarify this issue, a mitigation measure was included in Section 5.2.2.1 of the Supplement requiring temporary and permanent diversion and drain ditches, and temporary and permanent retention and sediment basins for the control of stormwater run-on and runoff for the 100-year, 24-hour storm event.

Response 011-10

1. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, geotechnical investigations at the proposed site determined that suitable clay materials (i.e., a permeability of 1×10^{-7} cm/sec or less) for the 3-foot thick compacted clay layer, and gravel for the drainage layer are not available onsite. The currently permitted Rheox Mine near Hector, California, has been identified as a source of clay that would be able to provide the approximate 13.5 million cubic yards of clay required for the landfill. Similarly, an existing, permitted borrow site near Newberry Springs, California, has been identified as a source of gravel that would be able to provide the approximate 3.4 million cubic yards of gravel required for the landfill.

2. As noted in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement as part of the proposed project, Rail•Cycle is proposing to use a geosynthetic clay liner (GCL) rather than low permeability clay in its double-composite liner system. Therefore, clay may not be required for the proposed project. However, for purposes of the EIR/EIS, and as stated in the Draft EIR/EIS and Supplement, if clay is required for the liner system, it is assumed that the clay would come from the Hector Rheox Mine and gravel from Newberry Springs. While the Rheox Mine is identified as the assumed source, if Rail•Cycle requires clay, it intends to procure materials through a competitive contract and other sources may be utilized. To be awarded a contract, the source would be required to be an approved mining/borrow area with appropriate permits and licenses.

3. Regarding soils at the site suitable for use at the landfill (i.e., daily, intermediate, and final cover), as shown in Table 3.4 of the Draft EIR/EIS, Rail•Cycle estimates that the volumes of soil removed during the designed excavation (i.e., 104 million cubic yards) would balance with site requirements. Soil excavated during development of each cell would be stockpiled onsite to meet the various requirements of the landfill.

Response 011-11

1. As discussed in Response 011-10, low permeability soil has not been found at the proposed site. No excavations of such soil from below the ground water table is required or proposed by the project. However, the County agrees, that should such offsite excavation be required by the project, further CEQA analysis and review would be required.

Response 011-12

1. As discussed in Response 011-10, Rail•Cycle proposes to use a GCL rather than clay in its double composite liner. However, the County agrees that, should the project require more than 250,000 cubic yards of imported clay during a six-month period, additional CEQA analysis would be required. A mitigation measure has been included in this Final EIR/EIS (see Table S.2) that would require additional CEQA analysis should the project require more than 250,000 cubic yards of clay during any six-month period.

Response 011-13

1. Rail•Cycle has conducted a detailed stability analysis of the landfill liner system as a whole and for its various components in relationship to the proposed installation of the liner on side slopes (Rust, 1993d). The analysis considered static and seismic shaking conditions. As acknowledged by the comment, detailed engineering issues such as this are a permitting issue and not an EIR/EIS issue. A report detailing the results of the stability analysis has been submitted to the LEA, CIWMB, and RWQCB as part of the permitting process for the proposed landfill.

Response 011-14

1. Information to respond to this comment was included in the Supplement. The proposed landfill liner system is described in Section 3.2.4.1 of the Supplement. A detailed analysis of the evaluation of the liner system has been conducted (Rust, 1993a). Included in this evaluation is an engineering estimate of liner leakage which was performed by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground" (Rust, 1993a). He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned, from 0.003 to 0.6 gallons per-acre, per-year depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

Response 011-15

1. Quantitative estimates of leachate generation were developed by Rail•Cycle (Rail•Cycle, 1992a) and submitted to the RWQCB, LEA and CIWMB as part of the ROWD and Report of Disposal Site Information (RDSI) for the proposed landfill. Estimates of leachate generation were calculated using the COE's HELP hydrologic model for three scenarios: (1) a newly developed cell or module; (2) a module with interim fill; and (3) the cell under final conditions. The following leachate quantities were predicted:

   - Open Module (protective cover, no waste):
     - Peak daily drainage 76 gallons/acre (3,800 gallons/50 acre module per day)
   - Interim Module (50 percent filled, waste 150 feet deep):
     - Peak daily drainage 2.7 gallons/acre
     - Average annual drainage 595 gallons/acre
   - Closed Module (100 percent filled, final cover and cap installed)
     - No leachate is generated

2. Rail•Cycle estimates the maximum potential production of landfill liquids from the site, after 50 years of operation, to be 1.2 million gallons per year of leachate and 10.8 million gallons per year of gas condensate, or 12 million gallons per year of total landfill liquids (Rail•Cycle, 1992a). At the design rate of solid waste disposal of 21,000 tons per day, this liquid production is less than 2 gallons per ton of waste. This amount of liquid is sufficient to increase the average waste moisture content by about 0.8 percent. It is reasonable to expect this additional moisture to be absorbed by the waste.

3. Different liquid management practices can be postulated for the landfill active life and the closure/postclosure period. Whereas leachate would cease being generated after the site is closed, landfill gas condensate would continue to be generated after waste disposal stops and the site is capped and covered after site operations. During site closure, it is anticipated that a reinjection system would be constructed for reintroduction of landfill liquids below the cap. It is, however, reasonable to expect that operators and regulators at that time would use then-current data and technology to determine the most appropriate landfill gas condensate management program.

Response 011-16

1. Information to respond to this comment was included in the Supplement. Section 5.4.3.1.2 of the Supplement provided a detailed analysis of the potential emissions of VOCs from evaporation or reintroduction of collected leachate and landfill gas condensate. As discussed in the Supplement, VOC emissions from leachate and landfill gas condensate evaporation or reintroduction were estimated to be approximately 4.7 tons per year after 50 years of landfill operation. Approximately 98 percent of the VOC emissions are from evaporation or reintroduction of condensate.

2. Although emissions from the evaporation or reintroduction constitute only a 1 percent increase in the 560 tons per year of VOC emissions from other sources associated with the proposed landfill, the region (SEDAB) is a nonattainment area of the ambient air quality standards for ozone. VOC emissions from leachate and condensate evaporation or reintroduction and other landfill sources would represent a contribution to the existing violation of the ozone standard in the region. As discussed in Section 5.7 of the Draft EIR/EIS, this constitutes a significant unavoidable impact.

3. CEQA and NEPA require that feasible mitigation measures are implemented to eliminate or reduce significant impacts. Therefore, a mitigation measure was included in the Supplement (Section 5.4.3.1) requiring Rail•Cycle to evaluate leachate and condensate treatment systems currently in use or proposed for use at other landfills for implementation at the proposed Bolo Station.

Response 011-17

1. Information to respond to this comment was included in the Supplement. In the event that the regulatory agencies decline to allow the reintroduction of condensate and leachate into the waste unit, Rail•Cycle proposed that the liquids be disposed in a lined evaporation pond. The pond is proposed, as shown in Figure 3.1 of the Supplement, to be located in the south buffer zone. No further CEQA analysis would be required to consider the use of evaporation ponds at the site.

Response 011-18

1. To respond to this comment, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that requires Rail•Cycle to determine, in conjunction with the LEA and CIWMB, the optimum size for the working face for anticipated daily waste volumes to minimize:
   - Litter
   - Infiltration of precipitation
   - VOC emissions
   - Odors

Response 011-19

1. The commenter misinterpreted the discussion in the Draft EIR/EIS regarding which regulatory agencies would be involved in permitting the use of an alternative daily cover at the proposed landfill. As stated in Section 3.3.2.1.3 of the Draft EIR/EIS, Rail•Cycle would apply a minimum 6-inch thick layer of compacted soil or an alternative daily cover, if the use of an alternative is permitted for use onsite by the SWFP. The SWFP would be issued by the San Bernardino County Department of Environmental Health Services (SBCDEHS), as the designated LEA, with the concurrence of the CIWMB. Approval for the use of an alternative cover would also be required from the RWQCB as part of the WDRs for the landfill.

2. Rail•Cycle had entered into discussions with the RWQCB on a number of issues, including the proposed use of an alternative cover. Rail•Cycle has also entered into similar discussions with the LEA and CIWMB.

3. As a point of clarification, based on ongoing refinement of anticipated operations at the proposed landfill, Rail•Cycle plans to request

approval from the LEA, CIWMB, and RWQCB during the permitting process for use of an alternative cover on the side-slopes of the working face. Under this concept, a 6-inch layer of compacted soil would still be applied as daily cover on the top of the working face. The most likely alternative being considered by Rail•Cycle for use on the side-slopes of the working face is a reusable geotextile blanket.

Response 011- 20

1. The concern raised by this comment is noted; however, Bolo Station is in an area that experiences lower velocity winds than various other areas, in which landfills are operated in conformance with the litter control conditions of their permits. For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County, California (data from January through December 1991) is provided below:

PERCENTAGE OF HOURLY OBSERVED WIND SPEEDS

Wind Speed Higher Than:	Bolo Station	Altamont
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

2. The Altamont Landfill is located in an area of relatively constant wind velocity that has attracted wind powered electrical generating facilities. According to WMNA, this landfill is operated in compliance with the conditions of its SWFP including litter control. The Altamont Landfill is permitted to receive up to 11,500 tons of waste per day and typically receives 6,000 tons of waste on a daily basis. The majority of waste is transported to the site by transfer trailers that are tipped at the working face using a portable tipper similar to those proposed at Bolo Station.

3. Litter control measures for the proposed Bolo Station Landfill were discussed in Section 3.3.2.1.3 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected onsite.

4. By only accepting post-recycled waste or waste that has been processed through a MRF, as will be required as a condition of approval by the County, a significant portion of the primary source of litter at most landfills (i.e. paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the litter control measures (discussed in Sections 5.8 - Public Health and Safety and 5.9 - Visual Resources of the Draft EIR/EIS) that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

5. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program. This program shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high wind velocity. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

Response 011-21

1. Information to respond to this comment was included in the Supplement. As stated in Section 3.2.4.4 of the Supplement, one landfill gas flare would be installed when the landfill gas collection system begins to produce sufficient volumes of gas to make operation of a flare practical. Based on anticipated waste volumes and projected landfill gas generation rates, sufficient volumes of landfill gas are expected to be generated within three to five years of the start of landfilling operations.

2. The flare would be located at the northwest corner of the landfill area adjacent to Landfill Cell No. 2 (see Figure 3.1 of the Supplement for the location of Cell No. 2). The specific location of the flare at the northwest corner of the landfill would be determined during final design and engineering of the landfill gas collection system.

3. The flare would have a design and permitted capacity sufficient to handle the volume of landfill gas that would be generated on a daily basis through the initial 10 to 12 years of landfill operations. At that time, Rail•Cycle projects that

sufficient volumes of landfill gas should be available to allow for efficient energy recovery, and an appropriate energy recovery facility would be designed, permitted (including an appropriate CEQA analysis), and constructed. As the time period for an energy recovery facility is 10 to 12 years after the proposed landfill begins accepting waste, it would be speculative at this time to discuss the details of the facility that could be installed. Rail•Cycle would evaluate the technology available at that time and consult with regulatory agencies (i.e., LEA, CIWMB, MDAQMD and the County Planning Department) to determine the appropriate type of energy recovery facility to install.

4. The initial flare would be retained after installation of the energy recovery facility for emergency and overload conditions. Additional backup flares would be added as required to assure emergency capacity in the event of disruption in the operation of the energy recovery facility.

Response 011-22

1. See Figure 4.2.4 of the Draft EIR/EIS for a map depicting the locations of historic earthquake epicenters within a 20-mile radius of the proposed landfill site. This figure, by definition, also includes the location of historic earthquake epicenters within a 5-mile radius of the site.

Response 011-23

1. This comment requests information regarding estimated maximum noise levels (Ld_{max}) at the perimeter of the proposed landfill during full operations (21,000 tons per day). Maximum noise levels at the site perimeter would depend on the type of landfill operation conducted onsite adjacent to the perimeter of the site.

2. The following potential Ld_{max} values have been estimated assuming a 500 foot buffer zone separates landfill operations from the perimeter:
   - Railroad Main Line: Based on data presented in Appendix J of the Draft EIR/EIS, the Ld_{max} at areas of the site perimeter adjacent to the ATSF rail line is estimated to be 97 dBA.
   - Railyard and Unloading Facility Operations: Ld_{max} at areas of the site perimeter adjacent to the onsite railyard and unloading facility is estimated to be 93 dBA based on data obtained from a noise impact analysis conducted for the American Railroad Association (Wyle, 1973).
   - Landfill Operations: Areas of the site perimeter adjacent to active landfill operations are estimated to have a Ld_{max} of 81 dBA.

3. Based on the above, the Ld_{max} at the site perimeter of the proposed landfill would range from 81 to 97 dBA depending on the type of operations conducted in a specific vicinity.

Response 011-24

1. Anticipated water demands for construction and operation of the proposed facilities have been refined since distribution of the Draft EIR/EIS and were provided in Section 3.2.6 of the Supplement. The location of the onsite wells is proposed to be located on Section 33, recently acquired by Rail•Cycle. As discussed in Section 5.2.1.2 of the Supplement, the Bristol Basin is in overdraft, use of the water by the proposed action would be considered a significant unavoidable impact.

Response 011-25

1. Potential impacts from lighting and related glare from night operations at the proposed landfill were discussed in Section 5.9.1.2 of the Draft EIR/EIS. While there are existing light sources in the area, they are for the most part limited (i.e., Cargill's operations at Saltus and the communities of Amboy, Cadiz and Chambless). The proposed action would represent a new light source in this area of the Mojave Desert. As discussed in Section 5.9.7 of the Draft EIR/EIS, the illumination of the night sky by the proposed action is considered a significant unavoidable impact.

2. The specific impacts from night lighting from the proposed landfill on Route 66 is a function of the facility/area being illuminated and its distance from the highway. The EIR/EIS includes a mitigation measure that will require lighting at the proposed landfill to be shielded and directed downward to reduce fugitive offsite illumination and glare to the degree practical. The following facilities/areas at the proposed landfill would have night lighting:
   - A new County fire station would be constructed by Rail•Cycle approximately 200 to 300 feet from Route 66 near the landfill access road. The fire station would have safety/security lights on the building and its parking area. While the lighting at the fire station would be visible from

Route 66, the lights would not be directed at the highway and glare from the lights would not be an impact on the highway.

- Landfill entrance facility (administration and visitor's center) would be located approximately 1,200 feet from Route 66. The facility and its parking area would have safety/security lights. While the lighting at the entrance facility would be visible from Route 66, the lights would not be directed at the highway and glare from the lights would not be an impact on the highway.
- Railyard/offloading facility would be located approximately two miles south of Route 66. Area lighting for night offloading of rail cars would be provided. Lighting would be along the north side of the railyard with the lights directed to the south away from Route 66 and towards the ground. The illuminated area at the railyard would be approximately 500 feet wide and one mile long in an east to west direction. While the lighting at the railyard would be visible from Route 66, the lights would not be directed at the highway and glare from the lights would not be an impact on the highway.
- Portable lights at the landfill working face would be located two to four miles south of the Route 66 and light an area of approximately 1 acre. Over the anticipated life of the project, the portable lights would be visible from the highway when the working face is located on the north facing site of the landfill or approximately 50 percent of the time. While the portable lights at the working face would be visible 50 percent of the time from Route 66, the lights would not be directed at the highway and glare from the lights would not be an impact on the highway.

3. Based on the nature of the potential impact on Route 66 and the mitigation measure included in the EIR/EIS requiring landfill lighting to be shielded and directed downward, impacts to Route 66 are not considered to be significant.

Response 011-26

1. Section 4.14.2.2.1 of the Draft EIR/EIS detailed distances from the proposed landfill to the nearest residential and commercial/industrial land uses. Specifically this section identified that the closest residential areas are located in:
    - Amboy - Six miles west of the site.
    - Cadiz - Six miles east of the site.
    - Chambless - Five miles east of the site.

2. The closest industrial area to the proposed site is Cargill's operations at Saltus located three miles west of the site. Cargill has three active brine producing wells located approximately one-quarter mile southwest of the site boundary.

3. The closest agricultural area is owned and operated by CLC, (identified as Pacific Agriculture in the Draft EIR/EIS). CLC currently farms 1,440 acres near Cadiz, approximately six miles east of the proposed site. As discussed in Chapter 6.0 of the Draft EIR/EIS, CLC has filed an application with the County for expansion of its agricultural operations at Cadiz to a total of 9,600 acres. This expansion project was approved by the County in 1993. At its closest point, the CLC expansion area is located approximately two miles east of the proposed landfill.

4. Complaints, if any, regarding noise, odors, litter, or dust from the operation of the proposed landfill would be evaluated by Rail•Cycle as the operator, and appropriate steps would be taken to resolve the issue. It is also anticipated that complaints would be evaluated by SBCDEHS acting as the LEA. As necessary, the LEA would conduct its own investigation of the complaint to determine if it has merit. If the complaint has merit, the LEA would determine if the operation of the landfill is in violation of the conditions of its SWFP or if conditions of the SWFP require revision to assure compliance with applicable regulations. Depending on direction from the LEA, Rail•Cycle would modify its operation to resolve the issue.

Response 011-27

1. As discussed in Section 5.7.1.1 of the Draft EIR/EIS, fugitive dust from paved roads, unpaved roads, soil stockpiles, and the construction of landfill cells would be controlled through the application of water and dust suppressants. The dust reduction goal is 95 percent. The Draft EIR/EIS included a mitigation measure that requires the use of water and dust suppressants to minimize fugitive dust emissions.

2. Various chemical dust suppressants are available. As noted by this comment, calcium chloride is known to be an effective dust suppressant and is available in the area; however, other dust control methods, including the use of various chemical dust suppressants, are available and would be

evaluated for effectiveness, applicability and feasibility by Rail•Cycle during the initial construction period. The dust control method or methods deemed most effective during the initial construction period would be utilized during the operation of the landfill.

3. The identification of a specific dust control method or dust suppressant chemical to be used by the proposed action is not required in the EIR/EIS. What is required and has been provided in the EIR/EIS is a mitigation measure that requires emissions of fugitive dust from the proposed action be minimized through the use of water and chemical dust suppressants.

Response 011-28

1. A description of the hazardous waste temporary storage area that would be constructed and operated at the proposed landfill was included in Section 3.3.2.4 of the Draft EIR/EIS. The location of this facility was shown in Figure 3.4 of the Draft EIR/EIS.

Response 011-29

1. Figure 5.2.2 of the Draft EIR/EIS provided a schematic of the filling process and interface between two adjacent cells that create a continuous landform for phased closure of the landfill. As depicted in Figure 5.2.2, Cell No. 11 would have received waste and daily cover to fill its waste prism. During filling of Cell No. 11, its completed side slopes would be covered with intermediate cover material. Upon reaching its design elevation, landfilling in Cell No. 11 would be terminated and the top slope covered with intermediate cover material. When Cell No. 18 becomes the active landfill cell, waste and daily cover would be placed onto the covered side slope of Cell No. 11 and would continue until Cell No. 18 is completed.

2. Phased closure of completed cells would involve the placement of the final cover system onto areas of the landfill that have reached their final grade and elevation through the process described above. Placement of the final cover system over completed landfill cells would not necessarily conform strictly to underlying landfill cell boundaries, rather, the final cover would be placed in phases over completed portions of the landfill that lend themselves to the effective and efficient placement of final cover.

Response 011-30

1. Since distribution of the Draft EIR/EIS, the location, number and rating of the fire hydrants has been developed in consultation with the County Fire Marshall (see Section 3.2.5 of the Supplement). Onsite landfill equipment would carry fire extinguishers as required by regulation and permit conditions.

Response 011-31

1. Information to respond to this comment was included in the Supplement. As shown on Figure 3.1 of the Supplement, the public waste drop-off facility is proposed to consist of roll-off containers positioned on an asphalt pad approximately 3 feet below the public access area level. The asphalt pad would be sloped to a sump for the retention of runoff. The roll-off container would be equipped with covers to prevent precipitation from entering containers. On a scheduled basis, the roll-off containers would be transported to the landfill working face for disposal.

2. The public waste drop-off facility would also include small covered bins for self-haul recyclables (see Section 3.3.2.5 of the Draft EIR/EIS). Due to the small volumes of waste anticipated to be brought by the public to this facility, material recovery operations (i.e., removal of recyclables) is not proposed for this area, with the exception of the bins for recyclables. Recyclable materials deposited in the small recyclable bins would be removed and taken to an accumulation area at the landfill operation and maintenance center. Periodically, recyclables would be transported to appropriate recycling companies.

3. Access to the public waste drop-off facility would be controlled to prevent unauthorized waste from being left at the facility and to prevent scavenging of waste or recyclables. Public use of the facility would be supervised by trained personnel who would inspect and screen incoming waste.

Response 011-32

1. Runoff from the railyard/offloading facility would be collected by various drainage ditches. Collected runoff would be routed to a retention basin sized for the 100-year, 24-hour storm.

Response 011-33

1. The rail lines that would be used to transport waste to the proposed landfill are ATSF's main double-tracked line from Los Angeles to Chicago and are maintained, as required by federal regulations, at the highest level of service. These lines are inspected by the U.S. Department of Transportation and are continually inspected and maintained by ATSF.

2. The type of railcars and containers (intermodal cars and containers) to be used to transport waste to the proposed landfill are of standard design (i.e., height, width, and weight bearing capacity) used throughout the rail industry. The design standards for railcars are regulated by the U.S. Department of Transportation, Interstate Commerce Commission, and Federal Railroad Administration. Hundreds of these intermodal railcar and containers are currently used on a daily basis by ATSF to transport freight along the rail lines that would be used to transport waste to the proposed landfill.

3. The number of rail line bridges and underpasses/overpasses on the route to the proposed landfill is not germane to the EIR/EIS. The ATSF main line between Los Angeles and the proposed site involves several hundred bridges and underpasses/overpasses. What is germane to the EIR/EIS is that the design, construction, and maintenance of railroad bridges and underpasses/overpasses are governed by federal regulations. Within California, these regulations are overseen by the California Public Utilities Commission. Bridges and underpasses/overpasses on the rail lines to the proposed landfill meet or exceed existing regulations regarding their design, construction, and maintenance.

4. In California, the minimum vertical clearance for rail lines is 22 feet, and the minimum lateral width for railroad bridges and underpasses/overpasses is 14 feet. ATSF bridges and underpasses/overpasses have been designed to meet or exceed these clearances. The maximum height of an intermodal railcar with double stacked containers is 20 feet, 1 inch and the maximum width is 9 feet, 1-1/2 inches.

Response 011-34

1. As discussed in Sections 3.2.2 and 5.8.1.2 of the Draft EIR/EIS, the containers used to transport solid waste from the MRFs to the proposed landfill would be constructed to assure that liquids do not escape. While the containers would be leak proof for liquids, they would not be air-tight, and would be capable of compensating for fluctuations in air volume caused by partial decomposition of solid waste and changes in temperature (ranging between 60 and 120°F) and pressure (due to elevation differences) along the rail line between Los Angeles and Bolo Station. Therefore, pressure would not build up within the containers, creating a potential safety or fire hazard.

2. Some components of solid waste would begin to decompose prior to collection, and would continue to decompose during transit from the MRF to the landfill. During this early period, decomposition would proceed mostly by aerobic processes that produce carbon dioxide and water vapor, rather than by anaerobic processes that produce carbon dioxide, methane, and odorous volatile organic compounds (VOCs). Therefore, it is not expected that methane would be generated in the containers during transport of waste to the proposed landfill. However, for purposes of developing a conservative response to this comment, an analysis has been made of the amount of methane that would be generated in a container if decomposition was anaerobic.

3. Two scenarios are addressed as part of this analysis:
   - Gases are vented during a typical 10-hour trip from a MRF to the proposed landfill.
   - Gases are vented during a 10-hour trip from a MRF to the proposed landfill which has been interrupted by a 24-hour delay, due to temporary rail line closure or other unexpected delays.

4. Based on the conservative assumptions used for this analysis, it is estimated that approximately 1 cubic foot of methane could be generated during a typical 10-hour trip from a MRF to the landfill, and approximately 5 cubic feet of methane could be generated during a typical 10-hour trip from a MRF to the landfill, followed by an unexpected 24-hour delay. These gas generation rates are based on the following assumptions:
   - A container holds 30 tons of solid waste.
   - Based on CARB's 1990 document, *Suggested Control Measure for Landfill Gas Emissions* (CARB, 1990), 972 tons of methane are generated per 1 million tons of solid waste per year. According to CARB, landfill gas is comprised of approximately 50 percent methane, 50 percent carbon dioxide, and trace amounts of VOCs.

- Gas volume is calculated using the Ideal Gas Law (an equation which defines the relationship between volume, temperature, and atmosphere), assuming a temperature of 60°F, and atmospheric pressure of 1 atmosphere.

5. Free air space inside the container is estimated to be a minimum of 900 cubic feet. Therefore, under the assumptions used for this analysis, methane concentration inside the container would be less than 0.5 percent, as compared with methane's lower explosive limit (LEL) of 5 percent. Therefore, even if methane was generated in a container, no special precautions are considered necessary to prevent "risk of upset" conditions due to a buildup of methane in the waste containers during transport, offloading, and unloading (disposal).

Response 011-35

1. Similar to other railroad companies, ATSF designates various train operations as essential to public health and welfare. In the event of a labor dispute that precludes regular train crews from being used, operations designated as essential are operated by ATSF management personnel. Sufficient management personnel maintain current training and appropriate certificates/licenses to provide essential operations in the event of a labor dispute.

2. ATSF would designate Rail•Cycle trains as essential to public health and welfare, and would continue to operate these trains in the event of a labor dispute. As labor disputes would not interrupt the operation of Rail•Cycle trains, it is not anticipated that trucks would be used to transport waste to the proposed landfill. Therefore, a discussion of the potential impact to the highway infrastructure from the transport of waste to the proposed landfill by truck is not required.

Response 011-36

1. As discussed in Sections 1.1 and 3.2 of the Draft EIR/EIS, BLM has determined that the exchange of federal lands for lands owned by ATSF would involve the fee exchange of surface and subsurface rights, including mineral rights. Therefore, BLM would not retain mineral rights at the proposed landfill site.

Response 011-37

1. The level of analysis of the alternative sites was developed pursuant to the requirements of CEQA and NEPA to determine if a reasonable and feasible alternative site is available that would reduce or eliminate significant impacts associated with the proposed action. Neither CEQA or NEPA require that the analysis of alternative sites be at the same level of analysis as for the proposed action.

2. Regarding the example included in this comment, neither CEQA or NEPA require a level of analysis of an alternative site that would require actions such as the drilling of additional wells at the Cadiz Valley Alternative site. Given the desert region in which the alternative site is located, it is not unusual that only a few wells have been drilled that provide a general understanding of ground water at the Cadiz Valley Alternative site. The use of existing available data collected through literature review and searches provides a sufficient level of detail for the EIR/EIS to characterize ground water at the alternative site.

3. The level of analysis conducted for the alternative sites was sufficient to determine if a site was available that would meet the basic objectives of the proposed action while reducing or eliminating the significant impacts associated with the proposed action.

Response 011-38

1. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to the communities in southern California after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve the communities in southern California. The proposed action, which was developed in response to a request by the Los Angeles County Sanitation Districts for long-term landfill capacity, would meet that need by helping to satisfy the state's requirements, mandated by AB 939, for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise be feasibly reduced at the source, recycled or composted.

2. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action.

Response 011-39

1. As the CEQA lead agency for the proposed action, the County Board of Supervisors will adopt statements of overriding considerations for those impacts of the proposed action that are defined as significant unavoidable impacts. As requested by this comment, the County will provide a copy of the adopted statements of overriding considerations to CIWMB.

Response 011-40

1. As the CEQA lead agency for the proposed action, and as required by Section 21081.6 of the California Public Resources Code, the County has prepared a Mitigation Monitoring and Compliance Program for the proposed action.

Response 011-41

1. Compliance with AB 939 requirements is the responsibility of local jurisdictions. Part of that compliance includes assuring 15 years of disposal capacity for solid waste that cannot otherwise be diverted through source reduction and recycling. As discussed in Chapter 2.0 of the Supplement, even with full implementation of the diversion requirements of AB 939, a need will exist for substantial amounts of additional landfill capacity to serve the communities of southern California. The proposed Bolo Station Landfill would meet part of that need by providing a disposal option for solid waste that cannot be diverted.

2. Waste transported to Bolo Station would consist of post-recycled residual waste reflecting the AB 939 diversion programs implemented by the cities and counties from which the waste originates. As compliance with the requirements of AB 939 rests solely with cities and counties, it is anticipated that the cities and counties that may use Bolo Station would be in compliance with AB 939 with or without the assistance of the network of MRFs that may be part of the Rail•Cycle system.

3. Private projects such as Rail•Cycle can assist cities and counties in meeting AB 939 through contracts that provide specific services or components within the jurisdictions implementation program. For example, a city contracting with a Rail•Cycle MRF for processing and disposal of waste may negotiate a certain level of recovery for specific waste stream components. Such a contract may make Rail•Cycle responsible for a portion of the city's AB 939 diversion requirement and allow the city to demonstrate the 15-year disposal capacity requirement of AB 939. However, such a contractual arrangement does not relieve the city from its ultimate responsibility for compliance with AB 939.

4. As an owner/operator of a private landfill, Rail•Cycle has no control over the AB 939 compliance of a city or county that disposes of its waste at Bolo Station. While it is reasonable to expect that the MRFs through which the waste is processed would assist cities and counties in complying with AB 939, there are many variables beyond the control of the MRF or landfill operator that would determine the success of a jurisdiction's AB 939 implementation program.

5. Rail•Cycle provides the following resources that can assist cities and counties in complying with AB 939:

   - Assured disposal capacity.
   - Waste processing and recycling facilities.
   - Information useful in developing and monitoring waste diversion programs.

   Information that Rail•Cycle can provide for waste from MRFs that it controls includes total incoming waste volume, recovered volumes by recycled commodity, and residual disposal volume. The type and detail of the information available will differ from MRF to MRF depending on the types of users and contractual requirements under which the waste is received.

6. In recognition of the needs of cities and counties for information from the MRFs that processes their waste to assist them in documenting compliance with AB 939, the following mitigation measure is included in this Final EIR/EIS (see Table S.2):

   - Rail•Cycle shall make available to the appropriate LEA and the CIWMB information within its control regarding waste volumes and recovery rates at MRFs from which waste is disposed of at Bolo Station. To the extent that such information is available, reports will include the following for each MRF sending residual waste to Bolo Station:

- Gross waste receipts.
- Total volume of materials diverted for purposes of recycling, composting, or reuse by major commodity type (i.e., paper products, glass, plastic, metals and yard wastes).
- Total volume of residual waste transported to Bolo Station.
- Location of major end-markets for diverted materials.

Information content, format and reporting frequency will be provided in a specific plan developed for each MRF in consultation with the operator of the MRF, the appropriate LEA, and the CIWMB.

Response 011-42

1. The discussion of potential economic effects in Section 5.15.1.6 of Draft EIR/EIS presented potential sources of revenues and costs that could result from construction and operation of the proposed landfill. A discussion of actual revenues/costs would be speculative at this time, due to the number of variables that could affect the outcome. Such variables include, but are not limited to:

   - Volume of waste landfilled at the site on a daily basis.
   - Volume of waste diverted, if any, from other San Bernardino County landfills to the site.
   - Value of the per ton mitigation fee negotiated by the County with Rail•Cycle.
   - Future tipping fees at San Bernardino County landfills.

   The analysis presented in the Draft EIR/EIS provided a basis for making a final cost/benefit determination when more specific information becomes available. CEQA (Section 15145 of the Guidelines for Implementation of CEQA) does not require speculation and allows the lead agency to terminate its discussion of a particular impact, if the lead agency finds it too speculative for meaningful evaluation.

2. While not required by CEQA and not part of the EIR/EIS, the County Solid Waste Management Department is preparing a fiscal impact analysis regarding the potential fiscal impact of Rail•Cycle on the County's solid waste management system. The County's fiscal impact analysis would be considered by the County Board of Supervisors along with the information included in the EIR/EIS.

3. The discussion in the Draft EIR/EIS regarding the potential for the proposed landfill to impact the County's ability to fund its solid waste management system (depending on which set of variables occurs) was made in the interest of full disclosure. This potential effect was identified as a significant impact in Section 5.15.1.6.2 of the Draft EIR/EIS. However, this impact could be mitigated through reimbursement to the County of a negotiated tipping fee (i.e., mitigation fee) from Rail•Cycle. The determination of how such compensation would be utilized would be made by the County. Further, as reimbursements by Rail•Cycle are negotiable, the County would be able to incorporate compensation for project-related shortfalls into negotiated payments. The County has the ability to negotiate a fee structure with Rail•Cycle mitigating the potential impacts that could occur, thereby reducing this impact to below a level of significance.

4. A preliminary analysis of potential revenues that could result from the proposed landfill has been conducted by Rail•Cycle utilizing 1992 dollars. This analysis evaluated the economic potential for the first 15 years of operation at the Bolo Station Landfill (Arthur Anderson, 1992). The upper range of the potential income, revenues and employment estimated by this analysis are as follows:

   - $268 million in mitigation fees to be paid directly to the County by Rail•Cycle.
   - $3.9 billion in overall economic activity including direct and indirect personal income, and direct and secondary goods and services purchased/provided within the County.
   - $850 million in new direct and indirect personal income.
   - Approximately 1,326 new jobs during project construction and operation.

   While the results of the 1992 Arthur Anderson analysis of Rail•Cycle are considered speculative and for that reason not included in the Draft EIR/EIS, they have been provided in this response to provide general information.

Response 011-43

1. As discussed in Section 5.15.1.4.2 of the Draft EIR/EIS, the Morongo Basin is expected to experience a limited increase in population due to

the proposed action. This increase in population would be served by the existing infrastructure in the communities of the Morongo Basin. This infrastructure includes the Twenty-nine Palms and Landers landfills. The programs implemented by these communities to meet AB 939 would provide services to individuals residing in the area. The limited increase in population due to the proposed action would not alter the effectiveness of the AB 939 programs that may be implemented by the communities in the Morongo Basin.

2. In the event the communities of the Morongo Basin decide at some point in the future to enter into an agreement to transport their waste to the proposed Bolo Station Landfill, these communities would have to demonstrate compliance with AB 939. Therefore, the proposed action would have no impact on the communities of the Morongo Basin meeting their AB 939 requirements.

Response 011-44

1. The proposed action is comprised of a landfill and rail-haul of solid waste. The project concept is based on the expectation that cities and counties will need to separate recyclable materials from the waste stream at centralized locations, such as MRFs, prior to diversion of remaining waste to landfills in order to meet their AB 939 requirements. Rail•Cycle has proposed that waste that has undergone reduction be directed to the proposed Bolo Station Landfill via MRFs, which would be located along a rail line.

2. To enhance public understanding of how a MRF might serve the proposed action, a description of a typical MRF is provided in Section 3.2.2 of the Draft EIR/EIS. However, inclusion of this general description should not be construed to mean that construction and operation of MRFs is a part of the proposed action. To date, only the MRF in the City of Commerce has been approved. Any effort on the part of the EIR/EIS to predict where additional MRFs could be located, and to try to assess those impacts, would be speculative and misleading. CEQA and NEPA do not require speculative analysis.

3. This EIR/EIS evaluates impacts related to the transfer of solid waste by rail to the proposed landfill from up to seven MRFs that may be incorporated into the Rail•Cycle system. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs to the proposed site were evaluated in the Draft EIR/EIS in Sections 5.7, 5.8, 5.12 and 5.13, respectively. Additional information regarding transportation and noise impacts along the rail-haul route was included in Sections 5.4 and 5.5 of the Supplement.

4. As noted above, it would be speculative and misleading for this EIR/EIS to address the potential site specific environmental impacts associated with the construction and operation of undefined Rail•Cycle MRF locations. However, typical impacts that potentially could occur at a MRF location in southern California have been addressed in recent EIRs for two specific MRFs

   - City of Commerce MRF proposed by Rail•Cycle (David Evans and Associates, 1992).
   - West Valley MRF proposed by Kaiser/Burrtec in the City of Fontana (Chambers, 1993).

   The City of Commerce MRF is a Rail•Cycle project whereas the Kaiser/Burrtec project is not affiliated with Rail•Cycle.

5. Based on the EIRs for the City of Commerce and West Valley MRFs, the following typical environmental impacts may occur from the construction and operation of other MRFs in southern California (David Evans and Associates, 1992; Chambers, 1993):

   - Onsite grading to prepare for the construction of structures, parking areas and roadways. It is anticipated that most MRFs would be located in existing industrial areas along existing rail lines. Therefore, natural landforms are not expected to be disturbed.
   - Southern California is subject to seismic activity and ground shaking. MRF structures would be required to conform to seismic standards included in the Uniform Building Code.
   - The sites would be covered with impermeable surfaces (i.e., structures and paved areas) that, depending on the specific site, would result in additional storm water runoff. Liquids from materials processed through the MRF and facility washdown water would be generated. Separate onsite surface water drainage and liquid/washdown water collection systems would be required to protect surface water quality.
   - The MRFs would result in short-term (i.e., construction) and long-term (i.e., operation) air emissions in an air basin (SCAB) that is nonattainment for certain criteria pollutants.

This includes increased levels of carbon monoxide (CO) at roadway intersections from vehicular idling. Air emissions could be significant on both a local and regional basis. Various mitigation measures will be required to reduce the air emission impacts to the maximum extent practicable.

- Depending on the specific site, the additional truck traffic associated with transporting waste to the MRF could impact local traffic and circulation's. Roadway and intersection improvements to maintain an acceptable level of service (LOS) may be required.
- As it is expected that the majority of MRFs would be constructed in existing industrial areas near existing rail lines; land use impacts are not anticipated. Typical land use issues that would need to be addressed include, but are not limited to, zoning and General Plan land use designations, surrounding and land uses, noise, odor, lighting, aesthetics, and public utilities and services. Local jurisdictions would be responsible for assuring that land use issues are adequately addressed and that appropriate conditions of approval are established for each MRF.

As noted above, the site-specific impacts for each MRF will be addressed in EIRs prepared for the local jurisdiction.

STATE OF CALIFORNIA
PETE WILSON, Governor

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

RECEIVED
APR 1993
AM
BY

March 31, 1993

TO: Randy Scott
County of San Bernardino, Planning Department
385 N. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182

THROUGH: Jananne Sharpless
Chairwoman

FROM: James D. Boyd
Executive Officer

We have reviewed the San Bernardino County Planning Department's Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the Rail-Cycle Bolo Station Landfill (SCH# 91092020) dated November 25, 1992. My staff has discussed our concerns with Ms. Renee Mosher of the San Bernardino County Air Pollution Control District. At the direction of the State Clearinghouse staff, we are providing our comments directly to you. We thank you for the opportunity to comment.

Project Description

The proposed project involves rail transport of municipal solid waste from material recovery facilities (MRFs), to be located in various southern California cities and counties, and the establishment of a large capacity (2,100 acre), long-term (60 to 100 years) Class III landfill facility. The MRFs are not part of the proposed action and will be evaluated separately. The initial operation would begin with 3,000 tons of waste per day and will increase to a maximum of 21,000 tons per day within five to seven years. Of the 4,800 acres included in the proposed site, 2,100 acres would be used for landfilling.

Comments

The Draft EIR/EIS states that the proposed project may result in adverse impacts on air quality resulting from various emission sources associated with the landfill, including: fugitive landfill gas, a landfill flare, locomotives both on site and offsite, and heavy-duty construction equipment. Our specific comments are as follows:

1. Pg. 5.7-2. The Draft EIR/EIS summarizes in Tables 5.7.2 and 5.7.3 the air emissions, but does not provide specific information on emission factors (e.g. for both stationary sources and mobile sources such as locomotives and motor vehicles), calculations, operational parameters, ① and assumptions (e.g., gas generation rate, percentage of gas collected, estimated concentrations of carcinogens in the landfill gas, destruction removal efficiency of the flare, etc.) used to estimate criteria and non-criteria pollutant emissions. This information is apparently contained in a document entitled Air Quality Impact Analysis (AQIA) Bolo Station Facility, San Bernardino (Jacobs, 1992). In order to evaluate the basis for the emission estimates for all sources including landfill emissions and locomotive emissions, the supporting documentation should be provided in this document. ① CONT.

2. Pg. 5.7-12, fifth paragraph. The health risk analysis is summarized. The actual analysis, including unit risk factors and calculations used in assessing health risks along with the basis for each assumption used should be made a part of this document. ②

3. Pg. 3-31, Section 3.3.2.1.3, fourth paragraph. This section states that Rail-Cycle intends to use alternative daily cover such as synthetic materials (i.e., tarps, sheets or foams). It should be noted that some foams, depending on the chemical ingredients used, may result in air emissions of formaldehyde or ammonium thiocyanate. Formaldehyde has been identified as a toxic air contaminant by the Air Resources Board. Under acidic conditions of a landfill or in the presence of strong oxidizers, ammonium thiocyanate may react to form cyanide gas. The air quality impacts from foam products should be thoroughly evaluated prior to their use as alternative landfill covers. ③

4. Pg. 2-6, Section 2.6.2. We recommend that the Final EIR/EIS discuss how the facility, as presently designed, complies with the requirements of the U.S. Environmental Protection Agency's proposed New Source Performance Standards for municipal solid waste landfills (Federal Register, Vol. 56, No. 104, May 30, 1991). ④

5. Pg. 4.14-14, fourth and fifth paragraphs. The Draft EIR/EIS does not discuss, or evaluate existing sources of criteria pollutants that are located in the same air basin as the proposed project. An analysis of the cumulative impacts of criteria pollutants from Leslie Salt, National Chloride, Hills Brothers, and the proposed America Mine and Desert Garnet Mine, should be included in the Draft EIR/EIS. ⑤

Again, we thank you for the opportunity to comment on the Draft EIR/EIS. The San Bernardino County Air Pollution Control District has jurisdiction over stationary sources such as the Rail-Cycle Bolo Station landfill and we understand that they will be providing comments separately. If you have questions regarding our comments or if we can be of further assistance, please contact Jim Behrmann, Manager of the Toxics Program Support Section at (916) 322-8273.

cc: Charles L. Fryxell, APCO, San Bernardino County APCD
Renee Mosher, San Bernardino County APCD
Russ Colliau, DPR
Rosslyn Stevens, CIWMB
Jim Behrmann, ARB

DOCUMENT 012
CALIFORNIA AIR RESOURCES BOARD
RESPONSE TO COMMENTS

Response 012-1

1. The Air Quality Impact Analysis (AQIA) was provided to the MDAQMD, and other agencies and individuals that requested copies.

2. Chapter 12.0 of the Draft EIR/EIS included a list of the various technical reports prepared by Rail•Cycle and utilized to address potential impacts of the proposed action. Together, these reports constitute a small library of materials (i.e., over 2,500 pages). As stated in Chapter 12.0 of the Draft EIR/EIS, these reports are available for public review at the County Planning Department and the BLM-Needles Resource Area.

3. By making copies of the technical reports available at the County and BLM, these reports are considered to be available for public review (Section 21061 of the Public Resources Code). Information that is available for public review is not required by CEQA to be repeated in its entirety in an EIR (Section 21061 of the Public Resources Code). Including the findings of the various technical reports in the EIR/EIS, and making these reports available to specific agencies and the public for review meets the intent of CEQA and NEPA. It also balances the need to provide information on impacts of the proposed action in a concise document with the potential cost of reproducing and distributing several thousand pages, which only a limited number of commenters may wish to review.

Response 012-2

1. The Health Risk Assessment was included in the AQIA, which, as noted in Response 012-1, was available for public and agency review.

Response 012-3

1. As discussed in Section 3.3.2.1.3 of the Draft EIR/EIS, the use of alternative daily cover requires specific approval from the SBCDEHS, as the designated LEA, and CIWMB. In accordance with CCR Title 14, the LEA and CIWMB will take all aspects of the specific alternative methods and materials into account, including air emission issues, prior to approving the use of any alternative cover material at the proposed landfill.

2. Rail•Cycle anticipates that its request regarding alternative daily cover will be for the use of a reusable geosynthetic blanket, rather than foam.

Response 012-4

1. As discussed in Section 5.7.1.1 of the Draft EIR/EIS, the gas collection system for the proposed landfill would be designed and operated in accordance with the requirements of the draft EPA New Source Performance Standards (NSPS). The NSPS requires new municipal solid waste landfills emitting more than 167 tons per year of nonmethane organic compounds to install best demonstrated technology. In addition, the Draft EIR/EIS indicated that the gas collection system would be designed and operated in accordance with the requirements stated in the California Air Resources Board's (CARB's) August 1990, document, entitled, *Suggested Control Measure (SCM) for Landfill Gas Emissions* (CARB, 1990). The flare system envisioned for the other landfill would be designed and operated to remove greater than 98 percent by weight of NMOCs. This level of control efficiency would meet the requirements of the NSPS and CARB's 1990 SCM.

Response 012-5

1. No emissions information has been submitted to public agencies for the proposed America Mine and Desert Garnet Mine projects. Therefore, it is not possible for the EIR/EIS to provide the information requested by this comment for these other projects. MDAQMD provided the following emission estimates for existing sources, from its permit and emission inventory files:

CONTAMI-NANT	CARGILL (tons/year)	HILLS BROTHERS (tons/year)	RAIL•CYCLE (tons/year)
Total Organics	2.6	--	170
NO_X	5.2	9.2	570
SOx	0.3	0.1	36
CO	42.6	1.9	597
Particulate Matter	20.2	0.7	300

2. MDAQMD has no emissions listed for National Chloride's operations in the Bristol Basin, which, according to their files, has no stationary sources requiring permits.

3. The total emissions of existing sources in the Bristol Basin, as shown above, are small in relation to Rail•Cycle's emissions documented in Section 5.7 of the Draft EIR/EIS and refined in the Supplemental Air Quality Analysis for the proposed action (Rail•Cycle, 1993a). Cumulative impacts, therefore, will not be significantly greater than those of the proposed action.

SECTION 2.3

COUNTY/LOCAL AGENCIES COMMENTS AND RESPONSES

013

INTEROFFICE MEMO

1853
County of San Bernardino

DATE December 10, 1992
RDT
PHONE (619) 243-8183

FROM RICHARD D. THOMPSON
Assistant Land Development Engineer/North Desert Region

TO RANDY SCOTT, Senior Planner
Environmental Team

DEC 1992

SUBJECT DRAFT EIR/EIS RAIL CYCLE - BOLO STATION LANDFILL DATED NOVEMBER 1992

Thank you for the opportunity to review the subject report. This memo addresses Section 4.4.1, which is entitled "Surface Water and Drainage." This office does not have the technical studies referenced in the text, but the main one appears to be by Jacobs Engineering Group, Inc., entitled "Phase I, Geology, Hydrogeology, and Hydrology Site Characterization Study, Bolo Station Facilities."

The main problem this office has with the report concerns a watercourse identified on the U.S.G.S. quadrangle sheet (Cadiz, 1956, 15 minute) as Orange Blossom Wash (or Willow Wash). Under the heading "Drainage Features" it is stated most of the flow from this source is diverted away from the site. However, the Cadiz quadrangle map shows the main thread of the wash west of Kelbaker Road to a point 2 miles north of National Trails Road at which point the blue line is discontinued. The watershed at this point has the appearance of an alluvial fan with the contour radiating out in the typical semicircular pattern (see Figure 4.4.3). Further evidence of the flow pattern can be seen on the aerial photograph (Figure 4.4.4). ①

Earth berms have been constructed on the north side of National Trails Highway, but these are not of a substantial nature and would not withstand any sizeable flow, particularly as they are constructed perpendicular to the direction of flow.

It is the opinion of this office that somewhere in the vicinity of Windy Point, a rocky outcropping of the Bristol Mountains northerly of the Bolo site, the watershed enters what is known as the braided zone in alluvial fans. Single channel flows encounter flatter slopes of the mid-fan area, widen and become shallower, losing velocity and depositing sediment and debris. Materials that become deposited into previously - cut channels can backfill the old streambeds, leading to the abrupt development of new channels. Singular flows split and rejoin as channels are alternately cut and filled with sediment. There is evidence of substantial braiding in the valley between the Bristol Mountains and the Marble Mountains.

013

The tributary watershed for Orange Blossom/Willow Wash is quite large, extending several miles north of Interstate 40 into the Granite Mountains. If only a substantial percentage of these flows are assigned to the portion of the alluvial fan where Bolo is situated it changes the entire aspect of the design. It is most unlikely that the structures under National Trails Highway are designed for a 50 year storm, or that the railroad meets a 100 year design. ②

The effect of this is that any structure north of the railroad needs to be elevated in accordance with FEMA regulations. Also, since the railroad culverts are probably too small to convey design flows without creating a head, the backwater elevation needs to be determined and treated accordingly. Also, the proposed landfill is located between the outlet of these structures and Bristol Lake, and therefore serves to block the flows. Channel facilities will be needed to convey these flows around the site. ③

It is recommended that a study be prepared addressing these issues. Should there be any question, I may be reached at (619) 243-8183.

RDT:jw

cc: Larry Fast
Environmental Solutions, Inc.

DOCUMENT 013
SAN BERNARDINO COUNTY LAND DEVELOPMENT DEPARTMENT
INTEROFFICE MEMO - RICHARD D. THOMPSON
RESPONSE TO COMMENTS

Response 013-1

1. The hydrologic analysis conducted by Rail•Cycle for final design of the proposed landfill did not consider the earthen berms located on the north side of Route 66 (National Trails Highway) as acting as significant barriers to surface water drainage from the Orange Blossom Wash. As discussed in Section 4.4.1.2.1 of the Draft EIR/EIS, stormwater surface flow would be expected to enter the proposed site from the north and this flow was included in the analysis for the hydrologic design of the proposed action.

Response 013-2

1. The hydrologic design for the proposed landfill and its supporting facilities has been developed using procedures included in the San Bernardino County Hydrology Manual. The hydrologic design is based on the analysis of ten drainage areas (one of which is the Orange Blossom Wash), with a total drainage area of over 75 square miles (Rust, 1994). The analysis was based on the 100-year, 24-hour storm. The results of the analysis were used for the final design of the proposed landfill and its supporting facilities, including its surface water drainage system. The hydrologic analysis will be provided to the County and other agencies as part of the processing of various permits.

2. As discussed in Response 013-1, the hydrologic design for the proposed landfill did not consider the earthen berms located on the north side of Route 66 (National Trails Highway) as acting as significant barriers to surface water drainage from the Orange Blossom Wash.

3. Regarding the drainage structures under the ATSF main rail line, six such drainage structures under the ATSF tracks are located within the proposed project boundary. Section 4.4.1.2.1, Figure 4.4.3, and Table 4.4.1 of the Draft EIR/EIS provided information on these six structures including their location, type of construction, span or diameter, flow capacity, year constructed, and design storm event. As shown in Table 4.4.1, the six drainage structures were designed for the 100-year, 24-hour storm. As part of its hydrologic analysis, Rail•Cycle determined that one of the drainage structures (Bridge No. 654.7) appears to be undersized for the 100-year, 24-hour storm based on current analytical methods. A review of ATSF records documented one instance of storm flow overtopping the ATSF track at Bridge No. 654.7 in 1937. ATSF is currently evaluating a recommendation to reconstruct this bridge; however, the potential need for ATSF to reconstruct this bridge is not associated with the proposed action, but rather is associated with ATSF's routine maintenance and improvement of the rail line.

4. Notwithstanding the ongoing evaluation by ATSF regarding the potential reconstruction of Bridge No. 654.7, the final design of the proposed landfill is based on the 100-year, 24-hour storm and the resultant flows that could pass under or over the ATSF rail line. As discussed in Sections 4.2 and 5.2 of the Supplement, diversion ditches and retention basins for the control of stormwater run-on and runoff shall be designed to meet the 100-year, 24-hour storm rather than the 25-year, 24-hour storm as stated for certain drainage features in the Draft EIR/EIS. A mitigation measure has been included in this EIR/EIS requiring temporary and permanent diversion and drainage ditches, and temporary and permanent retention and sediment basins for the control of stormwater run-on and runoff for the proposed action to be designed, constructed and maintained for the 100-year, 24-hour storm. The value for the peak flow rate from the 100-year, 24-hour storm will be calculated using acceptable engineering and hydrologic methods for the site.

Response 013-3

1. Based on the hydrologic analysis, the final design for the landfill support structures located north of the ATSF rail line (i.e., administration/visitor's center and the County fire station) includes a floor elevation 18 inches above the existing grade in accordance with the regulations of the Federal Emergency Management Agency (FEMA).

2. With the exception of Bridge No. 654.7, the hydrologic analysis conducted as part of the final design of the proposed landfill determined that the remaining five drainage structures under the ATSF rail line will handle the flow from the 100-year, 24-hour storm. As shown in Figure 3.4 of the Draft EIR/EIS, a drainage diversion channel would be constructed parallel to and immediately south of

the ATSF rail line. This channel would flow from west to east and is designed for the 100-year, 24-hour storm from ATSF bridges 654.7 through 653.4 (see Figure 4.4.3 of the Draft EIR/EIS). This channel would provide run-on protection for the proposed landfill and its support facilities located south of the ATSF tracks. Smaller diversion berms or channels have been designed to divert the 100-year, 24-hour storm from ATSF bridges 655.7 and 656.0 (see Figure 4.4.3) west of the proposed landfill.

CITY OF CHINO HILLS
INCORPORATED 1991
2001 Grand Avenue
Chino Hills, CA 91709
(714) 590-1511 • Fax (714) 590-5646

014

December 21, 1992

Randy Scott, Senior Planner
Planning Department
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0182

Subject: Rail*Cycle - Bolo Station Landfill Draft EIR/EIS Review

After review of the Bolo Station landfill Environmental Impact Report/Environmental Impact Statement, the City of Chino Hills has found no significant impacts from the development of this project.

①

Thank you for the opportunity to respond to the draft EIR/EIS for the Bolo Station Landfill. The City of Chino Hills has no further comments at this time. However, we would appreciate being informed of any future development projects.

If you have any future questions, please fill free to contact me at (909) 590-1511.

Sincerely,

Ron Short AICP
Community Development Department

RS:jk

Council Members
Ed Graham Gary G. Larson Gwenn Norton-Perry Jim Thalman Mike Wickman

DOCUMENT 014
CITY OF CHINO HILLS
RESPONSE TO COMMENTS

Response 014-1

1. The commenter states that it found no significant impacts from the proposed action and no response is required.

015

INTEROFFICE MEMO

DATE February 1, 1993 PHONE 386-8726

FROM **CARRIE HYKE, Planner** MAIL CODE 0017
Planning/Recycling Division, Solid Waste Management Department

TO **RANDY SCOTT, Senior Planner** 0182
Environmental Team, Planning Department

FEB 1993
RECEIVED

SUBJECT **RAIL-CYCLE DRAFT EIR/EIS**

The following comments are in regard to the DEIR/DEIS. Pending the results of the Fiscal Impact Analysis required for the project, the Solid Waste Management Department may have additional comments on the project.

Page 2-6, Section 2.6.1 and Page 4.14-2, Section 4.15.1.1.3

> These discussions of the State requirements regarding the County Integrated Waste Management Plan are essentially correct. The passage of AB 2494 has postponed the due date for our CoIWMP until 18 months after regulations for it have been developed. Since the CIWMB has not yet issued these regulations, the previous January 1994 deadline has been voided. ①

Page 3-51, Section 3.3.2.5

> There appears to be no unloading area for the public waste drop-off area. Several spaces should be provided directly adjacent to the container area. ②

CH:js
js:railcycl.eir

12-1367-000 Rev. 7/92

DOCUMENT 015
SAN BERNARDINO COUNTY
SOLID WASTE MANAGEMENT DEPARTMENT
INTEROFFICE MEMO - CARRIE HYKE
RESPONSE TO COMMENTS

Response 015-1

1. As this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required. Chapter 1.0 of the Final EIR/EIS includes a list of changes and corrections to the Draft EIR/EIS.

Response 015-2

1. Subsequent to distribution of the Draft EIR/EIS, refinements to the proposed action occurred. Figure 3.1 of the Supplement illustrated an expanded detail of the public waste drop-off area.

CITY OF ONTARIO
303 EAST "B" STREET, CIVIC CENTER ONTARIO CALIFORNIA 91764-4196
(714) 986-1151
FAX (714) 391-2567

February 3, 1993

RECEIVED
FEB 1993
BY

Mr. Randy Scott
County of San Bernardino, Planning Department
385 N. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182

Dear Mr. Scott:

Thank you for the opportunity to review and comment on the Draft EIR/EIS for the Bolo Station Landfill proposed by the Rail-Cycle Corporation.

It appears that the primary impact to the City of Ontario would be from noise of the trains operating on the rail line adjacent to Eighth Street where it coincides with Ontario's City limits for approximately one and one-half miles.

According to the EIR/EIS, one outbound train and one inbound train per day per MRF is projected. Since several of the MRF's would be west of Ontario, this could amount to eight or more trips per day. ①

Also according to the EIR/EIS, noise impact would be considered significant if "noise levels were increased by more than 3 dBA in an area which includes sensitive receptors such as a residential area," and/or "the Ldn value increases above 65 dBA in a residential area" (page 5.13-1). This area is primarily a residential area. According to the report, both these conditions would occur. Therefore, I assume this impact would be considered significant. I also note the operating hours are proposed to be 8 PM to 6 AM for outbound (loaded) trips, and 8 PM to 11 PM for return (empty) trips. These hours are especially sensitive for residential uses.

Yet, no apparent mitigation measures are proposed for these sensitive receptors. The mitigation measures (employee hearing protection program, and on-site structure noise attenuation) are proposed for project employees and structures, not adjacent affected land uses. It would therefore appear that this significant impact has not been mitigated. While there are a variety of property line walls along the residential area, their heights, materials, conditions and ages vary. There is also undeveloped property available for future commercial uses which may be affected.

I would suggest consideration of mitigation measures for existing and future land uses which are affected by the increased noise. ②

If you have any question, please contact myself or John Freiman at (909) 391-2506 during our regular hours of 7 AM to 6 PM, Monday through Thursday.

Sincerely,

ONTARIO PLANNING DEPARTMENT

Otto Kroutil
City Planner

OK:jc

DOCUMENT 016
CITY OF ONTARIO
RESPONSE TO COMMENTS

Response 016-1

1. The rail line running through the City of Ontario is known as the Pasadena Subdivision, which was recently sold by ATSF to the Southern California Regional Rail Authority (SCRRA). As a condition of sale, ATSF has agreed to limit freight traffic on the Pasadena Sudivision. After 1993, through freight operations by ATSF on the Pasadena Subdivision are scheduled to cease, with the possible exception of Rail•Cycle's trains.

2. The Commerce MRF, and the majority of the future MRFs which could contribute waste to Rail•Cycle, would route trains via the San Bernardino Subdivision, which parallels Route 91, bypassing the City of Ontario (see Figure 4.12.2 of the Draft EIR/EIS). Currently, only one potential MRF may be sited in an area that would result in Rail•Cycle's trains operating on the Pasadena Subdivision that passes through the City of Ontario. At most, two future MRFs may be sited along this rail corridor. The maximum number of Rail•Cycle trains using the Pasadena Subdivision would be four trains per day (two outbound and two inbound) rather than eight as stated in this comment.

Response 016-2

1. Information to respond to this comment was included in the Supplement. The potential noise impacts associated with Rail•Cycle's trains using this rail corridor have been clarified as part of a subsequent analysis for the Supplement (Sections 4.5 and 5.5). The analyses indicated that noise impacts associated with the proposed action are not significant, and therefore do not require mitigation.

City of Fontana
CALIFORNIA

February 4, 1993

FEB 1993
RECEIVED
BY

County of San Bernardino, Planning Department
385 N. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182
Attn: Mr. Randy Scott

SUBJECT: DRAFT EIR/EIS ON THE RAIL-CYCLE BOLO STATION LANDFILL

Dear Mr. Scott:

Thank you for the opportunity to review the Draft EIR/EIS on the Rail-Cycle Bolo station landfill. In general, the City of Fontana supports alternative methods of waste disposal with recycling provisions in comparison to traditional landfill methods if the disposal site is environmentally safe. The City of Fontana, however, has serious concerns about the environmental and safety impacts that will occur on Fontana's arterial streets and along the AT & SF railroad right-of-way as a result of the increase in rail traffic generated by this project. Therefore, the City of Fontana requests that the Draft EIR/EIS be revised to address the following concerns:

TRAFFIC CONCERNS

1. The traffic counts used in the Hazard and Delay analysis for existing conditions are far lower than traffic volumes recently measured by the City. The following ADT counts shall be utilized in a revised analysis of grade crossings in Fontana:

Locust Ave.	8,700	Alder Ave.	11,100
Palmetto Ave.	7,600	Mango Ave.	7,400
Sierra Ave.	25,300	Juniper Ave.	14,100
Citrus Ave.	16,600	Beech Ave.	7,100
Etiwanda Ave.	14,200		

2. The proposed lanfill is estimated to have a 60-100 year life. Therefore, the analysis for buildout of the project should consider buildout traffic conditions for arterial streets in Fontana per the County Congestion Management Plan Riv/San traffic model. The buildout average daily traffic volumes per the City's traffic model, which is consistent with the Riv/San model, shall be used for analysis of 21,000 ton per day conditions on the following major and primary highways. ①

Sierra Ave.	33,000	Alder Ave.	23,000
Citrus Ave.	27,000	Etiwanda Ave.	19,000
Beech Ave.	19,000		

8353 SIERRA AVENUE (P.O. BOX 518) • FONTANA, CALIFORNIA 92334-0518 • (714) 350-7600
SISTER CITY — KAMLOOPS, B.C. CANADA

---

3. Although the EIR/EIS recognizes that the Southern California Regional Rail Authority has purchased the Santa Fe railroad tracks through Fontana, it does not consider the cumulative impacts of the commuter rail service to San Bernardino County that is scheduled to begin operations on March 15, 1993. Analysis of incremental increases in rail traffic, without consideration of long-term cumulative impacts can result in the lack of an overall comprehensive analysis sacrificing good infrastructure planning. The railroad crossing analysis contained in the EIR/EIS shall be revised to consider the unquestionably significant impact of commuter rail service at full operation in San Bernardino County. ②

4. Page 5.12-6, #9; The EIR/EIS rationalizes that a 67 percent increase in the Hazard Index and 117.9 hours of additional vehicle delay time caused by increased rail traffic is insignificant simply because it is similar to impacts caused by projected increases in automobile traffic volumes. Clearly the combined effect of increased automobile and rail traffic will warrant grade separations at some major highways and improved rubberized crossing pads at others. While projects such as Metrolink have made significant improvements at crossings in San Bernardino County to mitigate impacts and maintain safety, this project proposes to merely "continue working closely with the PUC to evaluate and coordinate grade crossing improvements". The EIR/EIS should insure full mitigation of environmental impacts and require that the Bolo Station Landfill project pays its fair share of the ultimate improvements necessary at rail crossings. ③

NOISE CONCERNS

The City of Fontana concurs with the comments made by the City of San Bernardino in its letter dated September 6, 1991 located in Appendix A.3 of the DEIR responding to the Notice of Preparation of an EIR/EIS for the Bolo Station Landfill. The City of Fontana is concerned with the increase in noise caused by the increase in rail traffic and does not believe issues related to noise were satisfactorily addressed in the DEIR. Specifically the City of Fontana has the following concerns with the noise analysis in the DEIR:

1. The impact of noise caused by the increase in train traffic on properties surrounding the AT & SF railroad R.O.W. is significant when the definition of significant listed on page 5.13-1 of the DEIR is applied to the noise calculations identified in tables J.1 through J.4 in Appendix J of the DEIR. The category identification in the DEIR that most closely corresponds to land areas in the City of Fontana is the "San Bernardino to San Bernardino/Los Angeles County line and return" identification. Tables J.1-J.4 clearly show that the noise level increase in the aforementioned category is more that 3 dBA in an area which includes sensitive receptors such as residential development. ④

The justification on page 5.13-4 of the DEIR that the noise impact to the SB/SB-LA County line category is not significant due to the years it will take to add a second train, does not adequately address the noise impacts of this project. The evidence in the DEIR shows that there will be an a significant effect on the environment when the second train is added. The justification applied to state that the noise impact is not significant only applies to short term impacts. Sections 15126 (e) and 15127 of CEQA requires the EIR to contain information concerning the cumulative and long-term effects of the proposed project which adversely affect the state of the environment: CEQA specifically states: "Special attention should be given to impacts which ... pose long-term risks to health or safety". Using the tables and analysis in the DEIR it can be concluded that there is a long-term increase in noise due to the proposed project that is significant and that these long-term significant impacts have not been mitigated. ④ CONT.

Due to the identified significant environmental effect to existing residential areas along the AT & SF railroad R.O.W. in the City of Fontana, CEQA requires that either the project be altered to avoid degradation to the environment or mitigation measures be proposed to minimize the significant effects. ⑤

2. The noise analysis in the DEIR fails to analyze the cumulative impacts in areas other that that mentioned in item no. 1 above. In the summer of 1993 the Metrolink is scheduled to operate in the AT & SF railroad R.O.W. The noise analysis does not take into account the noise that will be generated by the operation of the Metrolink and therefore the noise analysis does not accurately analyze the cumulative environmental impacts of noise. The analysis needs to be re-calculated to include the commuter train traffic generated by Metrolink. ⑥

3. Sensitive receptors such as the residential areas in the City of Fontana that boarder the AT & SF railroad R.O.W. are at or close to the 65 CNEL limit established by the Fontana General Plan's Noise Element (Table N-2) as the allowable exterior noise standard. Any addition to the noise level, unless mitigated, would cause a negative environmental effect. The vast majority of land that boarders the AT & SF railroad R.O.W is designated residential with the majority of the land developed with dwelling units which are within 100 feet of the centerline of the railroad. The additional noise generated by the proposed project needs to be mitigated to meet the standards of the City of Fontana. ⑦

4. The proposed project would generate noise that is in excess of the research completed by the Environmental Protection Agency (EPA). The EPA published in March 1974 a document entitled "Information on Levels of Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety" (EPA 550/9-74-004). Exhibit A-6 presents a table of land uses and requisite noise levels. In this table 55 LDN is described as the requisite level with an adequate level of margin of safety for outdoor uses, this includes residences, and recreation areas. Although the EPA "levels document" does not constitute a standard or regulation it is obvious that the proposed project is well above the identified safe level of noise exposure by the EPA and needs to be mitigated. ⑧

If you have any questions regarding Fontana's concerns about rail impacts, please contact Mr Paul Balbach, Deputy Planning Manager, at (909) 350-7629.

Sincerely,

David J. Martinez
Building & Safety/Planning Manager

DG & DLW

cc: Deputy Planning Manager
Environmental Protection Manager
Associate Planner (DW)
Associate Transportation Planner

File: 0610-60 Outside EIR's/Rail-Cycle Bolo Station Landfill

DOCUMENT 017
CITY OF FONTANA
RESPONSE TO COMMENTS

Response 017-1

1. This comment identifies updated existing and future traffic count data for railroad grade crossings in the City of Fontana. These data were incorporated into revised analyses included in Sections 4.4 and 5.4 of the Supplement.

Response 017-2

1. The rail line running through the City of Fontana is known as the Pasadena Subdivision, which was recently sold by ATSF to the SCRRA. As a condition of sale, ATSF has agreed to limit freight traffic on the Pasadena Subdivision. After 1993, through freight operations by ATSF on the Pasadena Subdivision are scheduled to cease, with the possible exception of Rail•Cycle's trains.

2. The Commerce MRF, and the majority of the future MRFs which could contribute waste to Rail•Cycle, would route trains via the San Bernardino Subdivision, which parallels Route 91, bypassing the City of Fontana (see Figure 4.12.2 of the Draft EIR/EIS). Currently, only one potential MRF may be sited in an area that would result in Rail•Cycle's trains operating on the Pasadena Subdivision that passes through the City of Fontana. At most, two future MRFs may be sited along this rail corridor. The maximum number of Rail•Cycle trains using the Pasadena Subdivision would be four trains per day (two outbound and two inbound).

3. Noise and traffic impact analyses documented in the Draft EIR/EIS represent an absolute worst case scenario, because the analyses did not consider limiting of through freight operations on the Pasadena Subdivision.

4. The potential noise and traffic impacts associated with Rail•Cycle's waste-by-rail trains using this rail corridor have been clarified in Sections 4.4, 4.5, 5.4 and 5.5 of the Supplement. The refined analysis supports the conclusion that cumulative rail traffic on the Pasadena Subdivision that passes through the City of Fontana would not result in significant noise or traffic impacts.

Response 017-3

1. As noted in Response 017-2 and in Section 5.4 of the Supplement, with the reduction of total ATSF freight traffic operated on the Pasadena Subdivision, traffic impacts related to Rail•Cycle operations along the Pasadena Subdivision are not significant. Therefore, further mitigation measures for traffic are not necessary.

Response 017-4

1. Potential noise impacts associated with the proposed action have been clarified as part of the refined analysis for the Supplement (Sections 4.5 and 5.5). The analysis indicated that noise impacts would not be significant and therefore do not require mitigation.

Response 017-5

1. See Response 017-4.

Response 017-6

1. See Response 017-4.

Response 017-7

1. See Response 017-4.

Response 017-8

1. See Response 017-4.

NEWBERRY
Community Services District
P. O. BOX 206 • NEWBERRY SPRINGS, CALIF. 92365

018

RECEIVED
FEB 1993
BY

February 3,1993

County of San Bernardino
and
U.S Department of The Interior
Bureau of Land Management

Re: Draft Environmental Impact Report /
Environmental Impact Statement
Rail-Cycle-Bolo Station Landfill

(1) Why was there not a Public Hearing for this project held in the
Newberry Springs area,as the RailRoad for this project splits
our Community right down the middle ?. A maximum of 21,000 Ton of ①
waste per day, possibly and probably more, traveling the entire
length of Newberry Springs,6 days a week, yet no Public Hearing
for the people who will be impacted. At full capacity with
21,000 Tons per day, 6 days a week, works out to an additional
14 trains per day thru Newberry, now are these 14 additional ②
trains figured at one way or will there be 14 trains returning
from the Bolo Station Site.?
We have 2 RR Crossings in Newberry Spgs. a mile apart,with
citizens living on both sides of the tracks, we have problems
now and in the past when the tracks are blocked by trains, what
will happen with an additional 14 or 28 trains, whatever the ③
case may be. Can we be assured the tracks will not be blocked
for any length of time, so our Fire Dept. may provide Emergency
Service when needed?
If in fact the PUC is going to be involved in the evaluation
and grade crossing improvements, why not work together with the
Newberry CSD and try to get the crossing at Ft.Cady renovated,so ④
there will be at least one crossing open for Emergency Services
at all times.

We also have concerns about the impact of additional children for
our School District, where are all these people going to live ? ⑤
Do we assume they will be living in 29 Palms, Morongo Valley area,

018

Not to mention Medical facilities, shopping and various every day living requirments. ⑤ CONT.

(2) Rail-Cycle is to include provisions for Fire and Emergency Medical services, Will this be on site ? Or provided by existing County services ? Will Rail-Cycle contract with the County of San Bernardino for Law Enforcement ? There are a lot of unanswered questions concerning every day living, not only with the new personel you will bring to our area, but the people that presently live here. ⑥

The EIR/EIS mentions Morongo Basin and Barstow area, however we feel because of the distance involved Newberry Spgs. will most likely be the choice for living and school. ⑦

The possible influx of this many people will indeed have quite an impact on the Newberry Spgs area and we really need to plan ahead however we need to be kept informed by the principles,so our Community will know what's going on. ⑧

Respectifully,
Vicki Morris
Betty "Vicki"Morris
Chairperson

DOCUMENT 018
NEWBERRY COMMUNITY SERVICES DISTRICT
RESPONSE TO COMMENTS

Response 018-1

1. Three public hearings on the Draft EIR/EIS were held by BLM in February 1993. These public hearings were held in Barstow, Twentynine Palms and San Bernardino. The sites for the public hearings were selected by BLM to provide centralized locations for the hearings. Newberry Springs is approximately 25 miles from Barstow.

2. Rail lines that would be used to transport solid waste to the proposed landfill cross through various communities including Newberry Springs. It is not practical or required by CEQA and NEPA to hold public hearings on the Draft EIR/EIS in each community that could be affected by a proposed action. The solution of holding public hearings in three different areas of San Bernardino County provided an opportunity for individuals in surrounding communities to attend any one of the three hearings.

3. The locations, dates and times of the three public hearings were included in the November 25, 1992, Notice of Availability for the Draft EIR/EIS. Copies of the Draft EIR/EIS were provided to the Newberry Springs Community Services District and the Newberry Springs Property Owners Association.

Response 018-2

1. The Draft EIR/EIS (Sections 3.3.1, 4.12, and 5.12) described train traffic in detail. At full landfill capacity, 21,000 tons of solid waste would be transported to the proposed site by trains. The maximum number of trains required for this volume would be seven per day, six days per week. This results in seven trips eastbound (trains transporting waste to the landfill) and seven trips westbound (trains transporting empty containers back to the MRFs) for a combined total of 14 Rail•Cycle trains per day, six days per week through Newberry Springs. Currently, a total of 37 ATSF trains per day (combined total of westbound and eastbound trains) pass through Newberry Springs. The proposed action would increase the combined total number of trains passing through Newberry Springs to 51 per day.

Response 018-3

1. Train-induced delays at the two crossings in Newberry Springs (Newberry Road and Mountain View Road) were addressed in Sections 4.12 and 5.12 of the Draft EIR/EIS. Appendix I of the Draft EIR/EIS included specific data regarding these roads and rail crossings.

2. As shown in Table I.9 of Appendix I in the Draft EIR/EIS, the delay for each train crossing is approximately one minute. Under the existing condition (i.e., no landfill trains), delays of approximately one minute occur 37 times per day. With the proposed action, the number of one minute delays per day would increase to 51 delays per day.

3. These periodic one-minute delays per train may affect fire or emergency vehicles waiting to cross the tracks while a train is passing. However, as Rail•Cycle trains would be a maximum of 4,000 feet long and the distance between Newberry Springs Road and Mountain View Road is approximately 1.1 miles (5,800 feet), both crossings could not be blocked by a passing Rail•Cycle train at the same time. As the delays for a train passing through a crossing are approximately one minute in duration, and given the distance between Newberry Springs Road and Mountain View Road, it would be more time-efficient for the emergency vehicle to wait for the passing train to clear the crossing rather than detour to the other crossing.

4. In addition to crossings being blocked by passing trains, rail crossings have the potential of being temporarily blocked in the event of train switching operations or due to equipment malfunctions. This is not a situation that is unique to the crossings in Newberry Springs or to ATSF. To assure that temporary blockages of crossings are minimized, the PUC has regulations intended to prevent crossings from being blocked for more than 10 minutes, except during an emergency situation. ATSF has adopted its own internal regulations that require ATSF trains to clear crossings in five minutes, except during emergency situations.

5. The two crossings in Newberry Springs are periodically blocked for short periods of time as switching operations occur onto a rail siding that services a nearby quarry. Rail•Cycle trains are not subject to this type of delay in Newberry Springs as they are passing through the community with no requirement for switching operations in Newberry Springs.

6. In the event of an equipment malfunction on a Rail•Cycle train that would prevent it from clearing one of the crossings in Newberry Springs, the length of the Rail•Cycle train (a maximum of 4,000 feet) would prevent it from blocking both Newberry Springs Road and Mountain View Road at the same time. In this case, emergency vehicles would be able to detour to the other crossing.

Response 018-4

1. Regarding the suggestion made by this comment concerning the Fort Cady Road crossing, ATSF indicates that this is a private road that terminates in each direction at the ATSF tracks (Brendza, 1993). The commenter's use of "renovated" in terms of Fort Cady Road is not appropriate as it implies that a rail crossing is in place at this location. For vehicles to cross the ATSF's tracks at Fort Cady Road would require the construction of a private rail crossing. The construction of a private crossing at Fort Cady Road would require the approval of the PUC.

2. Regardless of the existing status of Fort Cady Road, as discussed in Response 018-3, emergency vehicles using Newberry Springs Road or Mountain View Road could have a maximum of a one-minute delay associated with a passing train.

Response 018-5

1. Increased population and additional demand for public services associated with the proposed action was addressed in the Draft EIR/EIS, Section 5.15. Specifically, Table 5.15.1 of the Draft EIR/EIS indicates that, for purposes of the EIR/EIS, it has been assumed that approximately 50 percent of the population increase due to the permanent work force and indirect employment generated by the proposed action is expected to be located in the Barstow area.

2. As the commenter observes, some part of the Barstow area growth may occur in Newberry Springs. As the preference of individuals in selecting a community in which to reside cannot be predicted, it would be speculative to assume that a specific number of new families may decide to reside in Newberry Springs. As CEQA and NEPA do not require speculation, no attempt has been made in the EIR/EIS to assign a number of new residents associated with the proposed action that may choose to locate in various small communities such as Newberry Springs.

Response 018-6

1. Information to respond to this comment was included in the Supplement. As noted in Section 3.2.5 of the Supplement, Rail•Cycle has agreed to construct and participate in operational expenses of a new County fire station that would be located near the proposed Bolo Station Landfill. This facility would be staffed 24-hours per day by County firefighters with paramedic and HAZMAT training, augmented by paid-call volunteers from the Amboy-Cadiz community. The fire station building would include office space for the County Sheriff's Department, which would continue to provide law enforcement services in the area.

Response 018-7

1. As discussed in Response 018-5, the preference of individuals in selecting a community in which to reside cannot be predicted. Therefore, it would be speculative to assume that a specific number of new families may decide to reside in Newberry Springs.

Response 018-8

1. Informing the public and communities of potential impacts associated with proposed projects that could affect them is the reason that CEQA and NEPA documents are prepared. The information in the EIR/EIS will be considered by the County and Board of Supervisors prior to the County making a final decision regarding the proposed landfill.

2. The Newberry Community Services District and other interested agencies, groups, and individuals are encouraged to continue their participation in the EIR/EIS process and in the hearings that will be conducted by the County Planning Commission and Board of Supervisors.

NEWBERRY SPRINGS FIRE DEPARTMENT

P.O. Box 6 * NEWBERRY SPRINGS, CALIFORNIA 92365

February 9, 1993

San Bernardino County Planning Department
Attention: Randy Scott
385 North Arrowhead Ave.
San Bernardino, CA 92415-0180

Dear Sir:

We have read your EIR and EIS, regarding RailCycle, and are insulted that the community of Newberry Springs was not even mention in this document. This community didn't even make the mailing list. How could a project of this magnitude, be so insensitive to the citizens of Newberry Springs? ①

I have prepared several requirements that must be met if this project is permitted to continue, they are as follows:

* With 3000 tons of trash daily expected to traverse our community in trains that are an average of 4000 feet long traveling at a maximum speed of 70 Mph, we are requiring you to upgrade the railroad crossing at Fort Cady Road with your illustration "standard #9A, as contained in your EIR. There are only two means of crossing Santa Fe Railroad tracks at the present time. With the increased train traffic, which will increase to 21,000 tons daily, our emergency services provided by the Newberry Springs Fire Department, San Bernardino County Sheriff, San Bernardino County Fire Department and Desert Ambulance will be severely impacted. This is not a request to upgrade this railroad crossing, it is a requirement pursuant to the Uniform Fire Code, 1991 edition, section 2.101. ②

* We are requiring you to purchase a Fire Apparatus constructed to the specifications of the fire chief and Newberry Springs Community Services District board of directors. It must be constructed to NFPA 1991 standards and have a minimum of 2000 gallon capacity, 4 wheel drive, 4 person enclosed cab, and several other requirements, that will be specified later. The fire apparatus must also be accompanied with a maintenance agreement by RailCycle. RailCycle must provide ③

maintenance and upkeep to include tires, engine, transmission, front-rear drive train, water tank, pump, and foam system maintenance agreements., RailCycle must also be responsible for cost recovery necessary for fire suppression expenses. Cost recovery will include labor cost, insurance, fuel, meals, mutual aid agencies, lost or damaged equipment and any other expenses that may be incurred during the incident, including technical assistance or clean-up contractors, should there be any hazardous materials released. ③ CONT.

* Access roads capable of accepting vehicles the size of fire apparatus shall be maintained adjacent Santa Fe tracks, between Minneola road and Ludlow. All fire access roads must comply with Division 11 Section 10.201 thru 10.206 of the Uniform Fire Code. ④

* Minimum 5000 gallon water tanks, full of water, hauled behind each train while crossing the Newberry Springs area. One required per train for fire suppression of potential fires on train cars. You acknowledged the possibility of HOT LOADS, and the water will be used to fight fires on the trains and to prevent the fire from spreading into nearby residential areas. ⑤

* We require RailCycle to train all fire department and law enforcement personnel in specific needs of RailCycle. Hazardous materials training will be necessary for all first responders to any incident involving RailCycle. RailCycle shall absorb all cost and expenses to provide training to the first responders. All training and community Right to Know mandates shall be required under 29 CFR and SARA Title III. ⑥

These requirements are necessary for the community of Newberry Springs to maintain the basic services our citizens have become accustom to. Enhancing fire protection and emergency medical services by installing a railroad crossing may ensure greater community support for your proposed project. The addition of fire apparatus and water for fire suppression will make me, as the fire chief, a little more comfortable.

It still bothers me that this community was entirely overlooked during your research to develop the EIR and EIS. This is the same type of behavior that the County of San Bernardino has demonstrated. My advice to you is don't ignore our community if you expect to travel directly down the middle of it. We won't tolerate being treated like second class citizens, in a second class community. ⑦

Respectfully submitted,

Pat A. Dennen

Patrick A. Dennen, Chief
Newberry Springs Fire Department

cc: Board of Directors
    County of San Bernardino Supervisors
    Bureau of Land Management
    CSD File

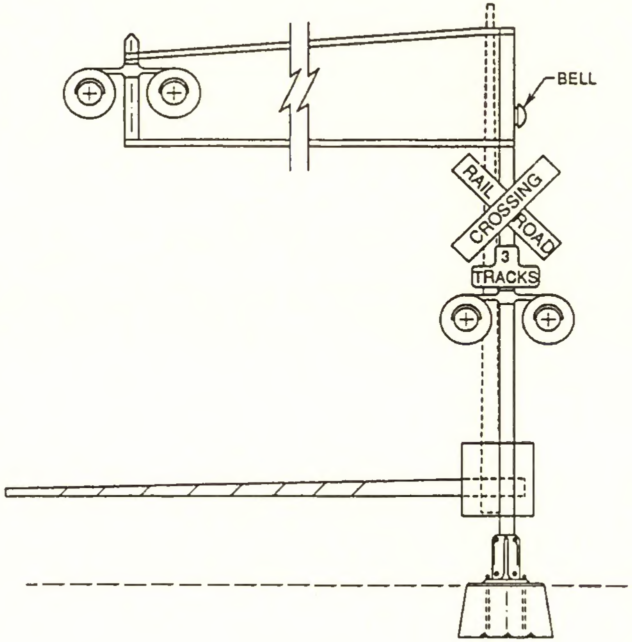


FIGURE I.4

**STANDARD NO. 9-A
WARNING SIGNAL**

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

DOCUMENT 019
NEWBERRY SPRINGS FIRE DEPARTMENT
RESPONSE TO COMMENTS

Response 019-1

1. While Newberry Springs is not specifically mentioned in the Draft EIR/EIS, there are various other large and small communities that are also not specifically mentioned and for which the proposed action could have impact similar as those to Newberry Springs, (i.e., rail traffic and socioeconomic). This is not to say that the impacts to Newberry Springs and these other communities have been ignored. For example, the potential increase in vehicle waiting times at Newberry Springs Road and Mountain View Road, both in Newberry Springs, were addressed in Sections 4.12 and 5.12 of the Draft EIR/EIS.

2. Regarding the statement that Newberry Springs was not on the mailing list for the Draft EIR/EIS, Chapter 11.0 of the Draft EIR/EIS provided the distribution list for the Draft EIR/EIS. Included on this list are the Newberry Springs Community Services District and the Newberry Springs Property Owners Association.

Response 019-2

1. Regarding the suggestion made by this comment concerning the Fort Cady Road crossing, ATSF indicates that this is a private road that terminates in each direction at the ATSF tracks (Brendza, 1993). The commenter's use of "upgrade" in terms of Fort Cady Road is not appropriate as it implies that a rail crossing is in place at this location. For vehicles to cross the ATSF's tracks at Fort Cady Road would require the construction of a private rail crossing. Construction of a private crossing at Fort Cady Road would require the approval of the PUC.

2. Regardless of the existing status of Fort Cady Road, train-induced delays at the two crossings in Newberry Springs (Newberry Road and Mountain View Road) was addressed in Sections 4.12 and 5.12 of the Draft EIR/EIS. Appendix I of the Draft EIR/EIS included specific data regarding these roads and rail crossings.

3. As shown in Table I.9 of Appendix I in the Draft EIR/EIS, the delay for each train crossing is approximately one minute. Under the existing condition (i.e., no landfill trains), delays of approximately one minute occur 37 times per day. With the proposed action, the number of one minute delays per day would increase by a maximum of 14, for a total of 51 delays per day.

4. These periodic one-minute delays per train may affect fire or emergency vehicles waiting to cross the tracks while a train is passing. However, as Rail•Cycle trains would be a maximum of 4,000 feet long and the distance between Newberry Springs Road and Mountain View Road is approximately 1.1 miles (5,800 feet), both crossings could not be blocked by a passing Rail•Cycle train at the same time. As the delays for a train passing through a crossing are approximately one minute in duration, and given the distance between Newberry Springs Road and Mountain View Road, it would be more time-efficient for the emergency vehicle to wait for the passing train to clear the crossing rather than detour to the other crossing.

5. In addition to crossings being blocked by passing trains, rail crossings have the potential of being temporarily blocked in the event of train switching operations or due to equipment malfunctions. This is not a situation that is unique to the crossings in Newberry Springs or to ATSF. To assure that temporary blockages of crossings are minimized, the PUC has regulations intended to prevent crossings from being blocked for more than ten minutes, except during an emergency situation. ATSF has adopted its own internal regulations that require ATSF trains to clear crossings in five minutes, except during emergency situations.

6. The two crossings in Newberry Springs are periodically blocked for short periods of time as switching operations occur onto a rail siding that services a nearby quarry. Rail•Cycle trains are not subject to this type of delay in Newberry Springs as they are passing through the community with no requirement for switching operations in Newberry Springs.

7. In the event of an equipment malfunction on a Rail•Cycle train that would prevent it from clearing one of the crossings in Newberry Springs, the length of the Rail•Cycle train (a maximum of 4,000 feet) would prevent it from blocking both Newberry Springs Road and Mountain View Road at the same time. In this case, emergency vehicles would be able to detour to the other crossing.

8. Regarding this comment's citation of Section 2.101 of the Uniform Fire Code (UFC). This section of the UFC does not contain requirements relative to standards for railroad crossing, rather it outlines the general authorities of the fire chief for code enforcement.

Response 019-3

1. The Rail•Cycle project and surrounding community are served by the County Forestry and Fire Warden Department. The Department would provide emergency services for the proposed action and surrounding community through a new County fire station to be constructed by Rail•Cycle near the entrance of the proposed land-fill. The new fire station is described in Section 3.2.5 of the Supplement.

2. The County Forestry and Fire Warden Department reviewed the requirements of the proposed action, including the transport of waste-by-rail through the High Desert portion of the County, and has determined that the proposed action would not have a significant impact on the Department's ability to provide emergency services (Miller, 1993). Rail•Cycle, as are other citizens and private enterprises, would be responsible for civil cost recovery for emergency services under the California Health and Safety Code 13009.

3. According to the County Forestry and Fire Warden Department, the Newberry Springs Fire Department has no legal requirement to provide services outside its Community Services District, except for its mutual aid agreements (Miller, 1993). As fire protection for the proposed landfill would be provided by the County, the request made by this comment for Rail•Cycle to purchase fire fighting equipment for the Newberry Springs Fire Department is not justified.

Response 019-4

1. The UFC provides for access roads for buildings or facilities, but does not include standards for access roads along railroad tracks. Approximately 66 percent of the rail lines between Minneola Road and Ludlow noted by this comment are protected by the County Forestry and Fire Warden Department and not the Newberry Springs Fire Department (Miller, 1993).

2. As there are no specific requirements regarding access roads along rail lines for fire protection, the request made by this comment for the inclusion of such access roads, even within the Newberry Springs Services District, is not justified.

Response 019-5

1. No hazardous fire area exists in the vicinity of Newberry Springs and the County Forestry and Fire Warden Department does not believe that a requirement for a water tank car as part of each Rail•Cycle train is necessary or appropriate (Miller, 1993). In the unlikely event a fire were to occur in a waste container during transport by rail, it is the position of the County Forestry and Fire Warden Department that it would be more advantageous to offload the materials at the landfill, which would have onsite emergency personnel and an adequate water supply (Miller, 1993).

Response 019-6

1. See Section 3.2.5 of the Supplement regarding training of County Forestry and Fire Warden Department personnel as HAZMAT first responders.

2. As discussed in Sections 5.8.1.4 and 5.8.1.5 of the Draft EIR/EIS, Rail•Cycle will comply with applicable federal and state regulations regarding employee and community right-to-know.

Response 019-7

1. See Response 019-1.

020

AIR POLLUTION CONTROL DISTRICT

COUNTY OF SAN BERNARDINO
ENVIRONMENTAL
MANAGEMENT GROUP

15428 Civic Drive, Suite 200 • Victorville, CA 92392 • (619) 243-8920
Fax No. (619) 243-8925

CHARLES L. FRYXELL
Air Pollution Control Officer

FEB 1993
RECEIVED
BY

February 16, 1993

Mr. Randy Scott
San Bernardino County Planning Department
Environmental Team
385 N. Arrowhead Ave, 3rd floor
San Bernardino, CA 92415-0812

RE: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE RAIL-CYCLE BOLO STATION LANDFILL

Dear Mr. Scott:

The San Bernardino County Air Pollution Control District (APCD) appreciates the opportunity to provide the following comments regarding the Draft Environmental Impact Report (DEIR) for the proposed Rail-Cycle Bolo Station Landfill. The APCD is responsible for adopting and implementing air quality regulations for the San Bernardino County portion of the Southeast Desert Air Basin (District), as mandated by the federal Clean Air Act Amendments of 1990 (CAAA) and the California Clean Air Act of 1988 (CCAA). Pursuant to the California Environmental Quality Act (CEQA), the APCD reviews and analyzes projects that may generate significant adverse air quality impacts. The APCD then advises the lead agency on air quality issues that may affect the APCD's efforts in attaining required State and National Ambient Air Quality Standards in the District.

Staff has reviewed the DEIR provided. While the analysis appears adequate and the information provided thorough, the APCD is concerned about the level of unmitigated emissions associated with the project and the effect that these emissions will have on the District's emissions inventory and attainment demonstration. Staff feels that the DEIR does not demonstrate a sufficient effort to mitigate those impacts to the maximum extent possible and that further measures should be included in the EIR. ①

Staff would be available to meet with you to discuss and analyze mitigation measures that could be applied to the project.

The APCD appreciates the opportunity to comment on the DEIR for the Rail-Cycle Bolo Station Landfill and looks forward to continued participation in the environmental review process. If you have any questions regarding our comments or would like to schedule a meeting, please contact Renee Mosher, Air Quality Planner, at (619) 243-8921.

Sincerely,

KAYODE F. KADARA
Deputy Air Pollution Control Officer

cc: Charles L. Fryxell, Air Pollution Control Officer
Alex Guilin, Deputy Air Pollution Control Officer
Renee Mosher, Air Quality Planner
Phil Smith, Project Coordinator
Glen Odell, Rail Cycle

DOCUMENT 020
SAN BERNARDINO COUNTY AIR POLLUTION CONTROL DISTRICT
RESPONSE TO COMMENTS

Response 020-1

1. Subsequent to distribution of the Draft EIR/EIS, a refined analysis was conducted of air quality impacts and included in Section 4.4 and 5.4 of the Supplement. Additional mitigation measures were included in Section 5.4.3 of the Supplement. Subsequent analysis determined that the proposed action would have a significant air quality impact after mitigation and requires a statement of overriding considerations.

The Town of Apple Valley
AV
1988
A Better Way of Life

Town of Apple Valley

22521 Shawnee Road
P.O. Box 429
Apple Valley, CA 92307

RECEIVED
FEB 1993
BY

RECEIVED
FEB 1993
BY

February 19, 1993

Randy Scott
County of San Bernardino
Planning Department
385 N. Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182

Dear Mr. Scott:

The Mojave Desert and Mountain Solid Waste Joint Powers Authority submits the following comments regarding the Rail Cycle Bolo Station Landfill Draft EIR/EIS.

A. Chapter 5.0 identifies Potential Environmental Impacts and "review the potential environmental consequences and mitigation measures of the proposed action and alternatives. Based upon these evaluations, significant unavoidable adverse affects of the proposed action are identified by topical area."

B. Section 5.15.1.6 focuses on Rail Cycle Economic Impacts. Construction related County revenues are supposed to be generated by taxes on goods and services, and wages and salaries, according to Paragraph 1. Paragraph 2 indicates that "(d)uring operations, revenues to the County are expected to accrue from landfill fees to be negotiated with Rail Cycle that may be based on the volume of waste received by the Bolo Station landfill." Additional revenues from payroll and sales taxes also are expected to accrue to the County.

C. Section 5.15.1.6.2 discusses impacts on the Solid Waste Management System. Paragraph 1 indicates that "the proposed action could result in costs to the County's solid waste management system." These costs typically include operations, equipment, closure, postclosure, acquisition and development, and overhead.

Paragraph 2 establishes the relationship between landfill volumes and tipping fees used to fund landfill costs. "While a portion of the costs can be tied directly to the tonnage requiring disposal, other costs are relatively fixed. If insufficient solid waste volumes are landfilled, the County may have limited alternatives other than to increase the per ton tipping fee."

The County also funds costs of Department of Environmental Health Services programs through landfill tipping fees, including household hazardous waste and abandoned vehicle management. Paragraph 4 indicates that "the costs for these programs are relatively fixed and may be adversely affected by a reduction in tipping fees due to a decrease in the volume of waste being landfilled at County landfills."

Paragraph 5 indicates that decreases in County landfill volumes could occur due to diversion requirements of AB 939, municipal use of out-of-county landfills either due to lower disposal costs or recycling facility contracts, or diversion to in-county private landfills.

Paragraph 6 discusses Rail Cycle's discussion of MRFs (Material Recovery Facilities) in various southern California cities, including communities within San Bernardino County. "If cities in the County reach an agreement for a Rail Cycle MRF, waste currently being disposed of at County-owned landfills could be diverted to the proposed Bolo Station Landfill ... the location of a single MRF in the County could potentially divert 60 percent to 90 percent of the total solid waste requiring landfilling in the County. Diversion of this percentage of solid waste requiring landfilling could have a significant adverse impact on the County's ability to fund its solid waste management system. This could be considered to be a significant impact."

D. The entire Section 5.15.1.6 is inadequate. There are no references or sources indicated for any of the information provided in the Section. The analysis is consistently conclusive without any substantiating fact or information. For example, no amounts of County or municipal tax revenues are projected. There is no indication of the expected amount of County revenue due to volume based Bolo Station landfill fees. Projected cost impacts on County landfills are not indicated.

E. Despite the lack of substantial discussion, the analysis concludes that Bolo Station landfill "could have a significant adverse impact on the County's ability to fund its solid waste management system. This could be considered to be a significant impact." Significant impacts must include mitigation measures (per 5.1.2). However, no financial mitigation measures are discussed or proposed for the Bolo Station landfill. Therefore, the financial impacts must be considered to be unavoidable adverse impacts, and included in Section 5.15.7. The financial impacts must be included with other unavoidable adverse impacts as effects which cannot be reduced below a level of significance, and be subject to a statement of overriding considerations. ①

F. As indicated in the City of Victorville's letter of September 16, 1992, responding to the Notice of Preparation contained in Appendix A of the document, consideration of any environmental impacts needs to include documentation of alternatives. These alternatives include alternative sites, alternative size and scope of the project, and the use of alternative technologies. The discussion of alternative technologies should include a complete and detailed analysis, not only of on-site impacts, but of off-site localized and cumulative impacts resulting from the project. ②

G. Health and Safety Code Section 44009 indicates that the California Integrated Waste Management Board may object to a solid waste facility permit which would prevent or substantially impair achievement of the diversion requirements in Section 41780. The environmental document must accurately describe the relationship of the landfill to required diversion programs, including an analysis ③ of alternative solid waste technologies. Discussion of potential project economic impacts on County landfills should include the relationship of the Bolo Station landfill to required local diversion programs. ③ CONT.

As of this date, San Bernardino County has not approved a Source Reduction and Recycling Element (SRRE) nor circulated a Final Draft SRRE. The Preliminary Draft SRRE indicated that the County would participate in regional efforts to provide source reduction and recycling and composting facilities and programs. However, the County has not joined nor committed to participate in the Mojave Desert and Mountain Solid Waste Joint Powers Authority regional efforts. The Bolo Station EIR/EIS should identify and analyze the project impacts on unincorporated County diversion programs. ④

H. The cumulative impacts analysis in the Draft EIR/EIS is inadequate. For example, it is not possible to determine the scope and magnitude of air quality impacts resulting from project implementation. The document needs to demonstrate how, following development of this project, the Southeast Desert Air Basin can comply with the California Clean Air Act. ⑤

I. The water quality analysis needs to assess the potential impacts of landfill subsidence due to groundwater pumping for continuing agricultural or mineral extraction, landfill operations (including PM10 reduction), and polluted groundwater treatment. ⑥

J. Landfill operations have been identified as raven population attractors by the California Department of Fish and Game and the United States Bureau of Land Management. Increased raven population and concentration has an adverse impact on Desert Tortoise population. A thorough and specific raven control program must be elaborated as a mitigation measure consistent with established guidelines and levels of effort required for other projects. ⑦

Thank you for the opportunity to comment on the Draft EIR/EIS. We look forward to reviewing the revised document.

Sincerely,

Kathy A. Davis

KATHY A. DAVIS, Chair
Mojave Desert and Mountain Solid Waste Joint Powers Authority

cc: JPA Board Members
JPA TAC Members

DOCUMENT 021
TOWN OF APPLE VALLEY - FEBRUARY 19, 1993
(MOJAVE DESERT AND MOUNTAIN SOLID WASTE JOINT POWERS AUTHORITY)
RESPONSE TO COMMENTS

Response 021-1

1. The discussion of potential economic effects in Section 5.15.1.6 of Draft EIR/EIS presented potential sources of revenues and costs that could result from construction and operation of the proposed landfill. A discussion of actual revenues/costs would be speculative at this time, due to the number of variables that could affect the outcome. Such variables include, but are not limited to:

   - Volume of waste landfilled at the site on a daily basis.
   - Volume of waste diverted, if any, from other County landfills to the site.
   - Value of the per ton mitigation fee negotiated by the County with Rail•Cycle.
   - Future tipping fees at County landfills.

   The analysis presented in the Draft EIR/EIS provided a basis for making a final cost/benefit determination when more specific information becomes available. CEQA (Section 15145 of the Guidelines for Implementation of CEQA) does not require speculation and allows the lead agency to terminate its discussion of a particular impact, if the lead agency finds it too speculative for meaningful evaluation.

2. While not required by CEQA and not part of the EIR/EIS, the County Solid Waste Management Department is preparing a fiscal impact analysis regarding the potential fiscal impact of Rail•Cycle on the County's solid waste management systems. The County's fiscal impact analysis would be considered by the County Board of Supervisors along with the information included in the EIR/EIS.

3. The discussion in the Draft EIR/EIS regarding the potential for the proposed landfill to impact the County's ability to fund its solid waste management system (depending on which set of variables occurs) was made in the interest of full disclosure. This potential effect was identified as a significant impact in Section 5.15.1.6.2 of the Draft EIR/EIS. However, this impact could be mitigated through reimbursement to the County of a negotiated tipping fee (i.e., mitigation fee) from Rail•Cycle. The determination of how to utilize such compensation would be made by the County. Further, as reimbursements by Rail•Cycle are negotiable, the County would be able to incorporate compensation for project-related shortfalls into negotiated payments. The County has the ability to negotiate a fee structure with Rail•Cycle mitigating the potential impacts that could occur, thereby reducing this impact to below a level of significance.

4. A preliminary analysis of potential revenues that could result from the proposed landfill has been conducted by Rail•Cycle utilizing 1992 dollars. This analysis evaluated the economic potential for the first 15 years of operation at the Bolo Station Landfill (Arthur Anderson, 1992). The upper range of the potential income, revenues and employment estimated by this analysis are as follows:

   - $268 million in mitigation fees to be paid directly to the County by Rail•Cycle.
   - $3.9 billion in overall economic activity including direct and indirect personal income, and direct and secondary goods and services purchased/provided within the County.
   - $850 million in new direct and indirect personal income.
   - Approximately 1,326 jobs during project construction and operation.

   While the results of the 1992 Arthur Anderson analysis of Rail•Cycle are considered speculative and for that reason not included in the Draft EIR/EIS, they have been provided in this response to provide general information.

Response 021-2

1. Section 3.7 of the Draft EIR/EIS provided a discussion of alternative sites and scope of the proposed action. Subsequent to distribution of the Draft EIR/EIS, clarified information regarding the evaluation of alternative sites was included in the Supplement (Section 3.3).

2. Non-landfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective of the

proposed action to provide an environmentally safe landfill disposal option to southern California communities, after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, would meet that need by helping satisfy the requirements of AB 939, for cities and counties to provide environmentally safe landfill disposal as a solution to solid waste that cannot otherwise be feasibly reduced through source reduction, recycled or composted.

3. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action.

Response 021-3

1. The commenter is correct in stating that the CIWMB may object to the issuance of a SWFP for a project that would interfere with the diversion requirements of AB 939. However, the proposed action would not interfere with cities meeting their AB 939 requirements. The Draft EIR/EIS indicates in Section 3.2 that the proposed action consists of two elements: (1) rail-haul of municipal solid waste; and (2) construction and operation of the landfill. The waste reduction requirements of AB 939 apply to waste generation, collection, sorting, and recycling that would occur prior to the activities analyzed in the EIR/EIS.

2. Compliance with AB 939 requirements is the responsibility of local jurisdictions. Part of that compliance includes assuring 15 years of disposal capacity for solid waste that cannot otherwise be diverted through source reduction and recycling. As discussed in Chapter 2.0 of the Supplement, even with full implementation of the diversion requirements of AB 939, a need will exist for substantial amounts of additional landfill capacity to serve the communities of southern California. The proposed Bolo Station Landfill would meet part of that need by providing a disposal option for solid waste that cannot be diverted.

3. Waste transported to the Bolo Station Landfill would consist of post-recycled residual waste reflecting the AB 939 diversion programs implemented by the cities and counties from which the waste originates. As compliance with the requirements of AB 939 rests solely with cities and counties, it is anticipated that the cities and counties that may use Bolo Station would be in compliance with AB 939 with or without the assistance of the network of MRFs that may be part of the Rail•Cycle system.

4. Private projects such as Rail•Cycle can assist cities and counties in meeting AB 939 through contracts that provide specific services or components within the jurisdictions implementation program. For example, a city contracting with a Rail•Cycle MRF for processing and disposal of waste may negotiate a certain level of recovery for specific waste stream components. Such a contract may make Rail•Cycle responsible for a portion of the city's AB 939 diversion requirement and allow the city to demonstrate the 15-year disposal capacity requirement of AB 939. However, such a contractual arrangement does not relieve the city from its ultimate responsibility for compliance with AB 939.

5. As an owner/operator of a private landfill, Rail•Cycle has no control over the AB 939 compliance of a city or county that disposes of its waste at Bolo Station. While it is reasonable to expect that the MRFs through which the waste is processed would assist cities and counties in complying with AB 939, there are many variables beyond the control of the MRF or landfill operator that would determine the success of a jurisdiction's AB 939 implementation program.

6. Rail•Cycle provides the following resources that can assist cities and counties in complying with AB 939:

   - Assured disposal capacity.
   - Waste processing and recycling facilities.
   - Information useful in developing and monitoring waste diversion programs.

Response 021-4

1. The proposed action has no relationship to the preparation by County and its cities of specific source reduction and recycling elements required by AB 939. The proposed action would not prevent

the County or its cities from participating in various programs intended to meet the requirements of AB 939. The issue raised by this comment, regarding the County and its cities developing means of complying with AB 939, are policy and political issues that are not related to the proposed action.

Response 021-5

1. This comment does not provide information to support its position that the cumulative impact analysis in the Draft EIR/EIS was inadequate. CEQA and NEPA do not require that cumulative impacts be analyzed in as great as detail as the effects attributable to the project alone. For each environmental category evaluated in the EIR/EIS, other projects in the region which could incrementally result in cumulative impacts for each respective impact category have been evaluated. See Chapter 6.0 of both the Draft EIR/EIS and the Supplement for the analysis of cumulative impacts.

2. Regarding air quality impacts, refined evaluation of air quality mitigation measures proposed for implementation as part of the proposed action was presented in Sections 4.4 and 5.4 of the Supplement. The additional analysis completed for the Supplement stated that the proposed action would result in significant air quality impacts in SEDAB.

3. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate performance with MDAQMD's Air Quality Attainment Plan.

Response 021-6

1. Sections 4.1 and 5.1 of the Supplement summarized additional studies which were conducted regarding potential settlement at the site. The supplemental analysis detailed the maximum potential cumulative settlement which could be caused by both landfilling and ground water pumping (Jacobs, 1993b).

2. Additional analysis was also conducted to quantify the potential of ground water contamination. Section 5.2 of the Supplement summarized the studies which concluded the following:

   - The vertical spread of any migration of gas and leachate from the waste body would be controlled by the speed at which it could disperse and diffuse within the aquifer. Given the slow measured rates of ground water movement at the site, mitigative actions to remediate any detected release could be undertaken long before significant downgradient movement could occur.

3. As noted in the Draft EIR/EIS, should leachate or landfill gas generated by the project be determined to be contaminating ground water, a corrective action plan would be developed and implemented in conjunction with the RWQCB as required by CCR Title 23, Chapter 15.

Response 021-7

1. Section 5.6.1 of the Draft EIR/EIS acknowledged the concern raised regarding the proposed landfill attracting ravens to the site and the potential increase in the raven population in the region. The Draft EIR/EIS also acknowledged that such an increase could result in additional impacts on the desert tortoise, as ravens are known to prey on tortoise.

2. The control of ravens and other bird species at the proposed landfill was discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations would be employed that are expected to be effective in limiting the attractiveness of the site to ravens and other birds. In the event ravens or other bird species are attracted to the site, various measures will be implemented on an as-needed basis. Section 5.6.5 of the Draft EIR/EIS included specific mitigation measures that would be implemented if ravens or other birds are found to be attracted to the site. These measures include, but are not necessarily limited to, the use of an overhead nylon line grid system (bird wires), distress tapes, propane cannons, and racket bombs. The effectiveness of these measures would be monitored and, if these measures are found to be ineffective, additional measures would be developed by Rail•Cycle in consultation with BLM, USFWS, and CDFG.

3. In addition, Rail•Cycle, in consultation with BLM and USFWS, conducted a baseline raven study that included an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys during this 12-month period documented raven (as well as other bird species) populations and usage patterns in the study area. Baseline data gathered as a result of this study will be compared to data collected during the operation of the proposed landfill. If comparison of data finds that ravens are being attracted to the site, or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented at the landfill in consultation with BLM, USFWS, and CDFG.

4. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

022

The Town of Apple Valley
AV
A Better Way of Life

Town of Apple Valley

P.O. Box 429
Apple Valley, CA 92307

Recycled Paper

February 26, 1993

MAR 02 RECD

Mr. Randy Scott
County of San Bernardino
Planning Department
385 N. Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182

SUBJECT: DRAFT EIR/EIS ON THE RAIL-CYCLE BOLO STATION LANDFILL

Dear Mr. Scott:

Subsequent to your presentation at the recent City/County Planning Director's Association of San Bernardino County, it was requested by the members present that a letter of concern be directed to the County regarding the above-referenced project.

This proposed project will have a significant adverse impact on the air quality of our entire region. The primary air quality emissions result from rail transport of solid wastes from the South Coast Air Basin to eastern San Bernardino County. Local governments are being required to implement numerous measures to improve air quality which adversely affect businesses, new development and daily lives of local residents. At full operation, the impacts associated with this single project could offset a substantial portion of the air emission reductions projected for all of these numerous measures combined. Therefore, there is a significant concern when the major mitigation measure identified of railway electrification is considered as not economically feasible for the proposed action. Some sources suggest up to forty percent of the emissions from the rail operations could be mitigated directly through other measures. There are also numerous offsets or other transportation control measures which are available to reduce the impacts associated with this project. ①

There is also a concern regarding the no project alternatives identified. It appears to be a specially selected alternative project involving relatively long distance hauling by trucks. An analysis of a no project alternative based on existing conditions and operations should be quantified and analyzed. ②

It is requested that the County carefully consider whether the benefits of this project outweigh the adverse environmental effects and whether the adverse effects are actually unavoidable. There are numerous additional measures that should be studied and considered for this project which could much further reduce, mitigate and offset air emissions associated with this project. The County is strongly encouraged to study, quantify and require application of additional measures to significantly reduce or offset air emissions, especially relating to rail operations. ③

On behalf of the
City/County Planning Director's Association
of San Bernardino County,

Nelson Miller

Nelson Miller, AICP
Manager of Planning Services
Town of Apple Valley

ltr/rail

ADMINISTRATIVE OFFICES
22521 Shawnee Road
Town Council
Town Manager/Town Clerk
Finance & Personnel
(619) 240-7000 FAX 247-3885

PUBLIC WORKS
22411 Highway 18
Roads & Drainage
Apple Valley Water District
(619) 240-7500 FAX 240-7599

COMMUNITY DEVELOPMENT
14900 Apple Valley Inn Road
Administration/Redevelopment/
Economic Development
(619) 240-7900 FAX 240-7999

Building & Safety
(619) 240-7101 FAX 240-7399
Engineering
(619) 240-7350 FAX 240-7399
Planning
(619) 240-7200 FAX 240-7399

DOCUMENT 022
TOWN OF APPLE VALLEY
RESPONSE TO COMMENTS

Response 022-1

1. Subsequent to circulation of the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement described refinement and reevaluation of the impacts and mitigation such as transportation control measures and offsets. The Supplement also included information regarding rail electrification (Section 5.4.3.2). Although this analysis concluded that rail electrification solely to mitigate Rail•Cycle's air quality impacts was not economically feasible, region-wide efforts are underway to implement measures to significantly reduce locomotive emissions.

2. A recent study was conducted under contract to CARB to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:

   - Retarding injection timing and other engine modifications.
   - Selective catalytic reduction (SCR).
   - Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
   - LNG combined with SCR
   - Electrification.

   Based on the proposed regulatory framework, allowable locomotive emissions per net ton mile transported would be reduced by 80 percent between 1996 and 2003. ATSF is actively participating in the efforts to develop strategies to reduce locomotive emissions.

Response 022-2

1. Information to respond to this comment was included in the Supplement. Sections 4.4 and 5.4 of the Supplement included additional analysis of the No Action Alternative with regard to air quality impacts based on a revision of the number of miles waste hauling trucks would travel and the number of trains hauling waste from southern California under the No Action Alternatives.

Response 022-3

1. As suggested by the comment, the decision makers will take into consideration the information provided in the EIR/EIS, public hearings, and the entire administrative record for the proposed project as they evaluate the project. Should the Board of Supervisors determine that the benefits outweigh the unavoidable adverse impacts associated with the proposed action, they are required in accordance with CEQA to adopt a statement of overriding consideration.

2. Additional mitigation measures have been incorporated in the project as part of the Supplement and this Final EIR/EIS (see Table S.2). Specifically, supplemental air quality mitigation measures were included in Section 5.4.3 of the Supplement.

023

The Town of Apple Valley
AV
1988
A Better Way of Life

Town of Apple Valley

P.O. Box 429
Apple Valley, CA 92307

Recycled Paper

February 26, 1993

Mr. Randy Scott
County of San Bernardino
Planning Department
385 N. Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182

SUBJECT: DRAFT EIR/EIS ON THE RAIL-CYCLE BOLO STATION LANDFILL

Dear Mr. Scott:

Subsequent to your presentation at the recent City/County Planning Director's Association of San Bernardino County, it was requested by the members present that a letter of concern be directed to the County regarding the above-referenced project.

This proposed project will have a significant adverse impact on the air quality of our entire region. The primary air quality emissions result from rail transport of solid wastes from the South Coast Air Basin to eastern San Bernardino County. Local governments are being required to implement numerous measures to improve air quality which adversely affect businesses, new development and daily lives of local residents. At full operation, the impacts associated with this single project could offset a substantial portion of the air emission reductions projected for all of these numerous measures combined. Therefore, there is a significant concern when the major mitigation measure identified of railway electrification is considered as not economically feasible for the proposed action. Some sources suggest up to forty percent of the emissions from the rail operations could be mitigated directly through other measures. There are also numerous offsets or other transportation control measures which are available to reduce the impacts associated with this project.

There is also a concern regarding the no project alternatives identified. It appears to be a specially selected alternative project involving relatively long distance hauling by trucks. An analysis of a no project alternative based on existing conditions and operations should be quantified and analyzed.

It is requested that the County carefully consider whether the benefits of this project outweigh the adverse environmental effects and whether the adverse effects are actually unavoidable. There are numerous additional measures that should be studied and considered for this project which could much further reduce, mitigate and offset air emissions associated with this project. The County is strongly encouraged to study, quantify and require application of additional measures to significantly reduce or offset air emissions, especially relating to rail operations.

On behalf of the
City/County Planning Director's Association
of San Bernardino County,

Nelson Miller

Nelson Miller, AICP
Manager of Planning Services
Town of Apple Valley

ADMINISTRATIVE OFFICES
22521 Shawnee Road
Town Council
Town Manager/Town Clerk
Finance & Personnel
(619) 240-7000 FAX 247-3885

PUBLIC WORKS
22411 Highway 18
Roads & Drainage
Apple Valley Water District
(619) 240-7500 FAX 240-7599

COMMUNITY DEVELOPMENT
14900 Apple Valley Inn Road
Administration/Redevelopment/
Economic Development
(619) 240-7900 FAX 240-7999

Building & Safety
(619) 240-7101 FAX 240-7399
Engineering
(619) 240-7350 FAX 240-7399
Planning

023

The Town of Apple Valley
AV
1988
A Better Way of Life

Town of Apple Valley

P.O. Box 429
Apple Valley, CA 92307

Recycled Paper

February 26, 1993

RE: RAIL-CYCLE BOLO STATION LANDFILL EIR

Dear Planning Director:

Attached is a letter that has been prepared regarding the Rail-Cycle Bolo Station Landfill EIR. This project, proposed by a joint venture with Santa Fe Railroad, would involve hauling of trash from the Los Angeles Basin along Santa Fe rail lines, a distance of 225 miles to eastern San Bernardino County to a new landfill. At full operation, in five to seven years, it would add up to fourteen trains per day along these rail lines. This represents up to a seventy percent increase in rail traffic.

The EIR concludes there would be a significant adverse air quality impact. The EIR states that emissions from this single project results in a four percent increase in a combined NOx and ROG emission in the entire Southeast Desert Air Basin. This single project would eliminate up to eighty percent of the annual targeted reduction in baseline pollution from all other air quality measures combined, which we are required to implement. However, the major mitigation measure of railway electrification is considered in the EIR to be not economically feasible for the proposed action and no other major significant mitigation measures are quantified or proposed for railway operations. ①

I would encourage your expressions of concern regarding this project to the County of San Bernardino.

Sincerely,

TOWN OF APPLE VALLEY

Nelson Miller

Nelson Miller, AICP
Manager of Planning Services

ADMINISTRATIVE OFFICES
22521 Shawnee Road
Town Council
Town Manager/Town Clerk
Finance & Personnel
(619) 240-7000 FAX 247-3885

PUBLIC WORKS
22411 Highway 18
Roads & Drainage
Apple Valley Water District
(619) 240-7500 FAX 240-7599

COMMUNITY DEVELOPMENT
14900 Apple Valley Inn Road
Administration/Redevelopment/
Economic Development
(619) 240-7900 FAX 240-7999

Building & Safety
(619) 240-7101 FAX 240-7399
Engineering
(619) 240-7350 FAX 240-7399
Planning

DOCUMENT 023
TOWN OF APPLE VALLEY
RESPONSE TO COMMENTS

Response 023-1

1. Subsequent to circulation of the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement described refinement and reevaluation of the air quality impacts and mitigation such as transportation control measures and offsets. The Supplement also included additional information regarding rail electrification (Section 5.4.3.2). Although this analysis concluded that rail electrification solely to mitigate Rail•Cycle's air quality impacts was not economically feasible, region-wide efforts are underway to implement measures to significantly reduce locomotive emissions.

2. A recent study was conducted under contract to CARB to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:

   - Retarding injection timing and other engine modifications.
   - Selective catalytic reduction (SCR).
   - Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
   - LNG combined with SCR.
   - Electrification.

   Based on the proposed regulatory framework, allowable locomotive emissions per net ton mile transported would be reduced by 80 percent between 1996 and 2003. ATSF is actively participating in the efforts to develop strategies to reduce locomotive emissions.

The Town of Apple Valley
A Better Way of Life

Town of Apple Valley

P.O. Box 429
Apple Valley, CA 92307

Recycled Paper

March 3, 1993

Randy Scott
County of San Bernardino Planning Department
385 No. Arrowhead Avenue, 3rd floor
San Bernardino, CA 92415-0182

SUBJECT: COMMENTS ON DRAFT EIR/EIS FOR THE RAIL-CYCLE/BOLO STATION LANDFILL

Dear Mr. Scott:

We have significant concerns about the lack of substantial mitigation measures proposed for the significant adverse air quality impacts described in the EIR for the above-referenced project. The EIR states on Page 5.7-8 that "the proposed action results in an approximate four percent increase in combined NO_x and ROG emission in the SEDAB." The Southeast Desert Air Basin (SEDAB) includes the desert portions of Kern, Los Angeles, San Bernardino, Riverside Counties and all of Imperial County. Therefore, the emissions related to this single project would offset eighty percent of targeted annual emission reductions required by the California Clean Air Act across five counties. Yet, the only mitigation measure proposed for the major source of emissions, the rail transport, is for an annual replacement program of older locomotives. No quantification of this measure is provided. ①

Concerns Regarding Analysis

The EIR also suggests on Page 5.7-18 that the proposed project is consistent with the SCAQMD Air Quality Management Plan Measure No. A-D-1 which supports out-of-basin transport of biodegradable solid waste. However, that measure is only considered appropriate in conjunction with electrification of rail lines used for transport. The EIR concludes this is not economically feasible. However, no supporting documentation of this conclusion is provided. Furthermore, the conclusion in the EIR makes the project inconsistent with the SCAQMD measure. ②

There are also serious questions about the analysis used to give an indication of "net air quality benefit" for the South Coast Air District based on a very questionable "no action" alternative. This alternative more properly should be considered an alternative project. A more appropriate no action alternative would be an analysis compared to existing conditions. Such an analysis does not appear to have been provided. Such analysis is required by the California Environmental Quality Act. ③

Additional Mitigation Measures

The EIR fails to consider other alternative mitigation measures or emission trades that could be utilized to significantly reduce the adverse air quality impacts associated with this project. A number of such mitigation measures are discussed in the August, 1991, California Air Resources Board Report (Mail Out #91-36) on Control of Locomotive Exhaust Emissions (copy attached). Measures identified include engine modifications, changes in operating practices, alternate fuels, as well as electrification. Emissions trading is also discussed. Some sources have estimated ④

ltr\raileir

ADMINISTRATIVE OFFICES
22521 Shawnee Road
Town Council
Town Manager/Town Clerk
Finance & Personnel

PUBLIC WORKS
22411 Highway 18
Roads & Drainage
Apple Valley Water District
(619) 240-7500 FAX 240-7599

COMMUNITY DEVELOPMENT
14900 Apple Valley Inn Road
Administration/Redevelopment/
Economic Development
(619) 240-7900 FAX 240-7999

Building & Safety
(619) 240-7101 FAX 240-7399
Engineering
(619) 240-7350 FAX 240-7399

---

that engine modifications and changes in operating practices could reduce emissions up to forty percent (40%). These are existing technologies and practices which could be readily implemented. Further, since this project would involve dedicated trains on a fixed route completely within California, special locomotives and fuels could be utilized. This offers potential additional reductions. Some of these measures have already been implemented with Metrolink, so these measures are already being utilized elsewhere within the existing system. ④ CONT.

Emission Trades

The EIR also does not discuss the mitigations which might be realized from emission trades to further reduce the adverse air quality impacts. A variety of potential measures should be studied, analyzed and quantified that could offset the adverse air quality impacts. Some of these might include:

1. Funding or provision of additional vehicles to Transit Districts, especially those that could reduce long distance commuter trips. This could significantly offset NO_x related impacts which are the largest emissions from the rail transport and also a primary component resulting from other mobile sources.

2. Funding or provision of alternate fueled vehicles, either for Transit Districts to further reduce emissions as identified in No. 1, above, or to local governmental agencies. Provision of such vehicles to school districts or other agencies with large fleets would have direct and indirect benefits. The indirect benefits would include new alternate-fuel bases, which could thereby encourage additional alternate fuel vehicles from other sources. Such alternate fuel bases are not commonly available in the desert area.

3. Funding of programs such as commuter and rideshare matching. A pilot program is currently under development for the Air Pollution Control District. This program by Commuter Transportation Services is called Commuter Connection. Annual funding beyond the pilot program has not been identified. Susan DeLuc of Commuter Transportation Services projects an annual emissions reductions of approximately 93 tons per year at an annual program cost of about $63,000.

4. Application of locomotive emission measures to other rail operations by the project proponent to offset increases relating to the proposed project.

These are only a few of the potential emission trades which could be studied and analyzed. Such emission trades when combined with available direct mitigation measures may have the potential to result in a true "not air quality benefit", or at least a no net increase in air emissions. ⑤

Other Significant Impacts

The lack of required analysis, inadequately supported and occasionally misleading conclusions, and failure to identify and address other potential mitigation measures regarding air quality impacts also raises a significant concern regarding the adequacy of the EIR as it relates to other identified significant adverse impacts including: ⑥

*Ground Water Supply
*Visual Resources
*Land Use
*Socioeconomics

ltr\raileir

024

For example, the EIR indicates a conflict with the County General Plan policies regarding land use. Therefore, to make a finding consistency with the County General Plan would appear to require amendments to the County General Plan. This requirement does not appear to be adequately discussed in the EIR. ⑥ CONT. It appears, in these other areas potential mitigations measures have been overlooked or not adequately considered and analyzed. Potential increases in raven population typically associated with landfills and predation on the desert tortoise has not been identified or discussed. Possible secondary impacts relating to impacts on the ground water supply associated with subsidence and potential contamination from the landfill should also be considered. ⑦

Furthermore, cumulative impacts should receive additional consideration, especially as it relates to other projects with certain similarities, including the disposal projects in Hidden Valley and Ward Valley. Particularly, the cumulative air quality, ground water supply, and socioeconomic impacts of these cumulative impacts should be identified and analyzed. ⑧

Conclusion

The draft EIR has identified significant adverse impacts that are concluded to be unavoidable even after mitigation, including impacts on air quality, ground water supply, land use, visual resources and socioeconomics.

There should be more analysis of these issues, especially relating to air quality as well as other areas of significant adverse impacts. Additional mitigation measures should be identified, studied and considered. At this time, there does not appear to be adequate information to support the conclusions that these impacts are actually unavoidable or that the benefits of this project outweigh the adverse environmental effects. ⑨

We hereby request a copy of any revised report or study prepared for this project to address the comments identified in this letter. We would also request a copy of all responses to comments, a copy of the Mitigation Monitoring Plan and notification of any hearings scheduled regarding this project.

Should you have any questions, need clarification of any issues or want to respond to these comments, please contact me at (619) 240-7220.

Thank you for your consideration.

Sincerely,

TOWN OF APPLE VALLEY
Nelson Miller
Nelson Miller, AICP
Manager of Planning Services

NM:sr
Attachment: CARB Mail Out #91-36

cc: Doug Romoli, BLM
Town Councilmembers

THE DOCUMENT FROM THE CALIFORNIA AIR RESOURCES BOARD THAT WAS ATTACHED TO THIS LETTER HAS NOT BEEN INCLUDED DUE TO ITS LENGTH. THE INFORMATION IN THE ATTACHMENT HAS BEEN CONSIDERED IN DEVELOPING RESPONSES TO COMMENTS (SEE SPECIFIC RESPONSES). A COPY OF THE ATTACHMENT IS ON FILE AT THE COUNTY PLANNING DEPARTMENT AND BLM FOR PUBLIC REVIEW.

ltr\raileir

DOCUMENT 024
TOWN OF APPLE VALLEY
RESPONSE TO COMMENTS

Response 024-1

1. Subsequent to circulation of the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement described refinement and reevaluation of the air quality impacts and mitigation such as transportation control measures and offsets. Although this analysis concluded that the proposed action will have a significant impact on air quality, region-wide efforts are underway to implement measures to significantly reduce locomotive emissions.

2. A recent study was conducted under contract to CARB to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:

   - Retarding injection timing and other engine modifications.
   - Selective catalytic reduction (SCR).
   - Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
   - LNG combined with SCR.
   - Electrification.

   Based on the proposed regulatory framework, allowable locomotive emissions per net ton mile transported would be reduced by 80 percent between 1996 and 2003. Santa Fe Railroad is actively participating in the efforts to develop strategies to reduce locomotive emissions.

Response 024-2

1. The commenter is correct that the statement on page 5.7-18 of the Draft EIR/EIS is inconsistent with the SCAQMD's Air Quality Management Plan Measure No. A-D-1. The AQMP measure not only assumed that transport is by electrified railroad lines, but it also was based on transport of refuse derived fuel, not solid waste, to out of basin energy recovery facilities. Therefore, AQMP Measure No. A-D-1 is not relevant to the Rail•Cycle project. This inconsistency was noted in Section 4.4.2 of the Supplement.

Response 024-3

1. Subsequent to the circulation of the Draft EIR/EIS, additional air quality analysis was completed. Sections 4.4 and 5.4 of the Supplement specifically included refined analysis regarding the air quality impacts of the No Action Alternative. It was concluded that emissions would decrease as a result of the 3,000 tons per day scenario (1994) resulting in a benefit to the air quality in SEDAB. Under the 21,000 tons per day scenario, criteria pollutants would increase in the SEDAB and is considered a significant impact.

Response 024-4

1. See Response 024-1.

Response 024-5

1. This comment suggests several air quality mitigation measures for consideration in identifying potential offsets for project emissions:

   - **Funding or provision of additional vehicles to transit districts:** This is a potential, but no data is available to evaluate potential effectiveness.
   - **Funding or provision of alternate fueled vehicles, either for transit districts, or to local government agencies:** Funding of alternate fueled transit vehicles and public agency fleet vehicles was evaluated in a supplemental air quality analysis (Rail•Cycle, 1993a). This measure was found to have a substantially higher cost per ton of emission reduction than others evaluated in the study and has been eliminated from consideration.
   - **Funding of programs such as commuter and rideshare matching:** To the extent that the cost and emission reduction data cited in the comment is accurate, the rideshare matching program would be a cost-effective mitigation measure. Mitigation measures were included in Section 5.4.3.2 of the Supplement that would require contribution to funding of public transport or ride sharing systems for communities in the SEDAB, and contribution of funding for a program to retire older vehicles in the SEDAB.

- **Application of locomotive emission measures to other rail operations:** Proposed emission controls to be imposed by CARB are projected to achieve an 80 percent reduction in NO_x emissions from locomotives by 2010. This aggressive program represents the most accelerated reduction of emissions achievable by the railroad industry. Additional activities by ATSF on behalf of Rail•Cycle are not considered feasible.

- **Combination of measures to result in no net increase in emissions:** The air quality analysis in Section 5.4 of the Supplement identified and evaluated a number of additional control measures. Although the net emissions of the project are substantially decreased as a result, it does not appear feasible to achieve a "no net increase" in emissions.

Response 024-6

1. The level of analysis in the Draft EIR/EIS regarding visual resources, land use, and socioeconomics is considered adequate for purposes of identifying the expected impacts of the proposed action. Subsequent analysis of impacts to ground water supply was included in Sections 4.2 and 5.2 of the Supplement.

2. With regard to the specific comment regarding a conflict with the County General Plan, Section 5.14.1.1.1 of the Draft EIR/EIS discussed that the proposed action would require an amendment of the County General Plan. However, Section 5.14.1.2 of the Draft EIR/EIS incorrectly indicated that the proposed project would require reclassification of the land use that would allow more intensive use of the site. If the County Board of Supervisors approves the proposed project, the County General Plan would be amended to revise the Infrastructure/Improvement Level Map and accompanying text to designate the site as the Bolo Station Landfill. The land use designation of Resource Conservation would be applied to the former federal land sections. The remaining sections of land at the proposed site are currently designated as Resource Conservation and would remain as such if the proposed action is approved.

3. The County Development Code allows landfills in various land use designations, including a Resource Conservation District, under the provisions that allow other land uses based on meeting locational criteria. The use of the proposed site as a landfill appears to meet these locational criteria; however, ultimately the County Board of Supervisors would consider this issue as part of its decision on the proposed amendment of the County General Plan that would be required for the proposed project to be permitted at the Bolo Station site. The consideration of the proposed project by the County Board of Supervisors would consider the regional perspective of the project as it relates to land use and consistency with the policies of the County General Plan.

4. The Draft EIR/EIS addressed County General Plan consistency in the evaluation of the proposed project's impacts to minerals, open space and land use. The Draft EIR/EIS identified these impacts after mitigation as significant and unavoidable. Additionally, the Summary Table of Impacts (Table 1.1) in the Draft EIR/EIS identified these unavoidable impacts as inconsistent with the County General Plan. However, this was not the conclusion reached in Sections 5.9.1.2 and 5.14 of the Draft EIR/EIS. The Draft EIR/EIS should have discussed that County General Plan determinations are the prerogative of the County Board of Supervisors as the policy making body of the County. Because there are many factors considered in an ultimate determination of General Plan consistency, the final conclusions are reserved as part of the County Board of Supervisor's action on the project. The initial determinations of inconsistency on the issues of open space and land use were reached on a limited, issue-specific evaluation that did not include the more comprehensive evaluation that the County Board of Supervisors will make when considering the overall consistency of the proposed project with the applicable policies of the County General Plan.

Response 024-7

1. The control of ravens and other bird species at the proposed landfill was discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations would be employed that are expected to be effective in limiting the attractiveness of the site to ravens and other birds. In the event ravens or other bird species are attracted to the site, various measures will be implemented on an as-needed basis to prevent bird populations from becoming established. Section 5.6.5 of the Draft EIR/EIS includes specific mitigation measures that would be implemented if ravens or other birds are found to be attracted to the site. These measures include, but are not limited to, the use of an overhead nylon line grid system (bird wires), distress tapes, propane cannons, and racket bombs.

The effectiveness of these measures would be monitored and, if these measures are found not to be completely effective, additional measures would be developed by Rail•Cycle in consultation with BLM, USFWS, and CDFG.

2. Rail•Cycle, in consultation with BLM and USFWS, conducted a baseline raven study that included an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys during this 12-month period documented current raven (as well as other bird species) populations and usage patterns in the study area. Baseline data gathered as a result of this study will be compared to data collected during the operation of the proposed landfill. If comparison of data finds that ravens are being attracted to the site, or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented at the landfill in consultation with BLM, USFWS, and CDFG.

3. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

4. Based on comments on the Draft EIR/EIS, additional analysis regarding subsidence and its potential impact on ground water supply was conducted. The results of the analysis and additional mitigation measures were included in Section 5.2 of the Supplement

Response 024-8

1. The analysis of cumulative impacts in Chapter 6.0 of the Draft EIR/EIS included issues such as air quality, ground water and socioeconomics and is considered adequate for purposes of CEQA and NEPA. This analysis included various projects in the area including those in Hidden Valley and Ward Valley.

Response 024-9

1. Chapter 5.0 of the Supplement included refined analyses of various issues, including air quality. Through these refined analyses and in response to specific comments on the Draft EIR/EIS and the Supplement, additional and/or revised mitigation measures have been included in this Final EIR/EIS.

2. One of the purposes of an EIR/EIS is to identify significant unavoidable impacts that cannot be mitigated below a level of significance. As an information document, it is not the purpose of an EIR/EIS to render an opinion as to whether the benefits of the proposed action outweigh the significant unavoidable impacts. The evaluation of the potential impacts and benefits of a proposed action is the responsibility of the decision makers for the project. In the case of the proposed Bolo Station Landfill, the decision makers are the County Board of Supervisors and BLM.

3. During their evaluation of the proposed action, the Board of Supervisors will consider the information included in the EIR/EIS, including the available mitigation measures and those impacts that have been identified as significant unavoidable impacts. The County Board of Supervisors will also consider the benefits of the proposed action and if they decided that the benefits outweigh the significant unavoidable impacts, in accordance with the CEQA Guidelines, would adopt specific statements of overriding considerations.

025

DEPARTMENT OF COMMUNITY DEVELOPMENT
207 Harvard Avenue ▪ P.O. Box 880 ▪ Claremont, CA 91711-0880 ▪ FAX (714) 399-5492 ▪

Engineering (714) 399-5465
Building (714) 399-5471
Planning (714) 399-5470
Code Enforcement (714) 399-5467

February 26, 1993

RECEIVED
MAR 4 1993
BY

Mr. Randy Scott
County of San Bernardino
Planning Department
385 N. Arrowhead Avenue, 3rd Floor
San Bernardino, California 92415-0182

SUBJECT: Draft EIR/EIS on the Rail-Cycle Bolo Station

Dear Mr. Scott:

I am writing on behalf of the SCAG Planning Directors Committee, which I chair. At our meeting of February 19, 1993, the committee voted to expresss our concerns regarding the significant adverse impacts on air quality identified for the above-referenced project. We believe the project is of substantial regional significance, especially in its air quality impacts.

Enormous efforts and emphasis have been expended and are projected for improving air quality and reducing air quality impacts in both the South Coast and Southeast Desert Air Basins. Numerous mitigation measures, transportaion control measures, offsetting mitigations and other measures have been discussed and developed to reduce air emissions in our region. The local governments we represent are doing their best to implement these measures and require them as part of our project approvals. ①

The Planning Directors Committee is concerned that that there has not been sufficient study and consideration of additional feasible mitigation measures that could be applied to this project to reduce or offset air emissions related to the rail transport component of the project.

We strongly urge the County of San Bernardino, as the lead agency, to explore and, if appropriate, require additional mitigation measures to reduce the air emissions related to the rail transport component of this project.

Sincerely,

Sharon Z. Wood

Sharon Z. Wood
Chairman

cc: Planning Directors Committee

100% Recycled Paper

DOCUMENT 025
SCAG PLANNING DIRECTORS COMMITTEE
RESPONSE TO COMMENTS

Response 025-1

1. Subsequent to circulation of the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement described refinement and reevaluation of the air quality impacts and mitigation, such as transportation control measures and offsets. Although this analysis concluded that the proposed action will have a significant impact on air quality, regionwide efforts are underway to implement measures to significantly reduce locomotive emissions.

2. A recent study was conducted under contract to CARB to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:

   - Retarding injection timing and other engine modifications.
   - Selective catalytic reduction (SCR).
   - Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
   - LNG combined with SCR.
   - Electrification.

   Based on the proposed regulatory framework, allowable locomotive emissions per net ton mile transported would be reduced by 80 percent between 1996 and 2003. ATSF is actively participating in the efforts to develop strategies to reduce locomotive emissions.

CITY OF
VICTORVILLE

619-955-5000
FAX 619-245-7243

14343 Civic Drive
Victorville, California 92392-2399

February 26, 1993

Mr. Randy Scott
County of San Bernardino
Planning Department
385 North Arrowhead Avenue - 3rd Fl
San Bernardino, CA 92415-0182

RE: COMMENTS ON THE DRAFT EIR/EIS FOR THE RAIL-CYCLE BOLO STATION LANDFILL PROJECT

Dear Mr. Scott:

Review of the above referenced document raised several concerns and questions as to the thoroughness and adequacy of the analysis of the environmental and economic impacts associated with the Rail-Cycle Bolo Station Landfill development. Specifically, uses related to air quality, water quality, endangered species, cumulative impacts, alternative analysis and economic/fiscal impacts to the High Desert.

AIR QUALITY IMPACTS

The document provides information on potential adverse impacts arising from the transportation of solid waste, landfill operations and the decomposition of waste. However, the analysis is inadequate because no identification of localized impacts has been provided for the potential exceedences of the California Clean Air Act or the Federal Clean Air Act guidelines. Therefore, the impacts, while identified, are not adequately addressed as to localized, regional and cumulative impacts to the affected jurisdiction within both the South East Desert Air Basin (SEDAB) and the South Coast Air Basin (SCAB). ①

While the document acknowledges that there are significant impacts, the analysis itself is faulty and inadequate because it does not fully identify the scope and magnitude of the impacts that will result from the implementation of this project. Specifically, the document should provide a thorough examination of railway electrification as a potential mitigation alternative. In addition, it should also address transportation control measures as either mitigation measures or offsets to the air pollution exceedences which have been identified. ②

The transport and mobile source operations are specifically stated to be outside the legal authority of local jurisdictions or agencies. However, this document purports to be an environmental impact statement prepared under the National Environmental Protection Act. Recent Supreme Court decisions indicate that transportation and mobile source emissions are specifically under the jurisdictions and regulation of the Federal Environmental Protection Agency (EPA). Therefore, the document as an EIS must address the Reactive Organic Gases (ROG), Oxides of Nitrogen (NOx), Carbon Monoxide (CO) and other emissions which can and will impact upon local jurisdiction abilities to obtain new business and industrial employees. ③

The document should thoroughly analyzes the air quality impacts to both SEDAB and SCAB to determine the potential for offsets or transfer of emissions credits for those reduction in air quality emissions which might occur within SCAB. Mitigation measures should be proposed to address adverse air quality impacts. Any benefi-cial air quality impacts should also be identified. ④

WATER QUALITY IMPACTS

The EIR/EIS inadequately analyze the potential impact which may arise from either seismic action or on-site subsidence which could occur due to the weight and pressure of landfill materials in conjunction with the pumping of ground water out of the aquifer.

The Water Quality discussion identifies an excavation of the site to within 15 feet of the existing ground water table. There is a 14 feet subsidence of the site identified in the analysis. The discussion fails to identify additional subsidence which may occur due to the proposed pumping of ground water for the mitigation of on-site dust generation (the PM10 control mitigation measures) called out within the report. This additional subsidence, coupled with the possibility for seismic activities, has not been analyzed. These two factors could contribute to a rupture of the lining allowing leachate from the landfill to enter the ground water table. The ground water supplies the brine used in the salt harvesting operations conducted by Leslie Salt, the mineral extraction operations of National Chloride, and Pacific Agriculture operations. A more thorough analysis is needed to specifically address the potential ecologic and economic impacts that ground water pollution will have on these industries. ⑤

Additionally, no mitigation measures have been presented which will prevent or alleviate such pollution of the ground water table. The ⑥ identified potential mitigation measures (pumping and treating of ground water) could exacerbate the problem by causing additional ground subsidence and permitting more leachate contamination of the ground water tables. ⑥ CONT.

ENDANGERED SPECIES IMPACTS

The biological resources analysis is inadequate. A more thorough discussion of both flora and fauna is needed to identify any impacts which may arise from both the excavation and operations at the Bolo Station Landfill site. The site appears to be within the identified range of both the Mohave Ground Squirrel and the Desert Tortoise. There is no identified impact analysis for these species. The Desert Tortoise survey indicates there is a low level of Tortoise population in the immediate vicinity; however, the proposal to fence the site does not appear to conform with the California Department of Fish and Game or the U. S. Department of Fish and Wildlife Service guidelines for a no net take mitigation for the Desert Tortoise. Mitigation measures should be identified specifically for any species impacted, and should be consistent with established guidelines and levels of effort required for other projects. ⑦

The increase in raven population (a known Tortoise predator) associated with landfill operations has been identified by the California Department of Fish and Game to be an adverse impact on Desert Tortoise populations. This adverse impact will further deplete the Desert Tortoise population in surrounding areas of higher quality habitat, and should be specifically addressed with some form of raven control as a mitigation measure which is consistent with established guidelines and levels of effort required for other projects. ⑧

CUMULATIVE IMPACTS

The EIR/EIS is inadequate in addressing the cumulative impacts of the proposed project on either air quality, water quality, endangered species, or economic and growth inducing impacts to surrounding communities. The Rail-Cycle Bolo Station Landfill project document does not consider or address the other known projects within the region which are significant and which will impact air quality, water related issues, endangered species and economic growth for the High Desert. This failure to acknowledge the existence of other projects needs to be addressed and the mitigation measures proposed should be consistent and in conformity with tions proposed and required for other regionally significant projects. ⑨ For example, the air quality discussion totally lacks any acknowledgement of the degeneration of ambient air quality which will result from the increase in locomotive traffic. More precise ⑩

mitigation measures, transportation control measures, and offset options need to be identified in light of the magnitude of the emissions generated by this single project together with the impacts previously identified for other regionally significant projects. ⑩ CONT.

ALTERNATIVE IMPACT ANALYSIS

As indicated in the City of Victorville's letter of September 16, 1991,prepared in response to the Notice of Preparation for this document, consideration of environmental impacts needs to include documentation of alternatives. The analysis must include alternative sites, alternative sizes and scope of the project and the use of alternative technologies. The analysis contained in the Draft EIR/EIS is inadequate since it does not have any alternative sites located in Los Angeles County, Riverside County, Orange County or Imperial County. Additionally, there is no examination of alternative technologies. Some consideration and discussion should entail waste reduction, waste reuse, energy generation from waste product, gasification of waste products or other technologies that may be developed for reduction or reuse of solid waste materials. ⑪

ECONOMICAL/FISCAL IMPACTS

The entire Economic Effects section is inadequate. There are no references or sources indicated for any of the information provided in the Section. The analysis is consistently conclusive without any substantiating fact or information. For example, no amounts of County or municipal tax revenues are projected. California does not authorize local employment taxes, although the document suggests this would provide a source of revenue to the County and municipalities. There is no indication of the expected amount of County revenue due to volume-based Bolo Station landfill fees. Projected cost impacts on County landfill are not indicated.

Despite the lack of substantial discussion, the analysis concludes that Bolo Station landfill "could have a significant adverse impact on the County's ability to fund its solid waste management system. This could be considered to be a significant impact." Significant impacts must include mitigation measures. However, no financial mitigation measures are discussed or proposed for the Bolo Station landfill. Therefore, the financial impacts must be considered to be unavoidable adverse impacts. The financial impacts must be included with other unavoidable adverse impacts as effects which cannot be reduced below a level of significance, and be subject to a statement of overriding consideration. ⑫

The analysis is inadequate since there is no consideration or ⑬ discussion of the value of 267 employees directly hired on the site and an additional 167 indirect jobs versus the potential loss of the economic growth ability throughout the South East Desert Air Basin. Additionally, the analysis needs to address the limited employment opportunities and the potential employment loss of the Leslie Salt operations, National Chloride mineral extractions and Pacific Agriculture due to potential air and water contaminants. Therefore, there needs to be a more thorough analysis of the "positive economic impacts" versus other projects which will create positive economic impacts with greater jobs and fewer adverse environmental impacts. Further, the additional employment identified at Bolo Station Landfill may be offset by the loss of employment arising from the identified adverse environmental impacts to Leslie Salt, National Chloride and Pacific Agriculture operations in the immediate vicinity of the project site. There have been no identified mitigation measures which will alleviate or compensate for the loss of economic opportunity due to the closure of three surrounding industries which could result from the development of the Bolo Station Landfill. ⑬ CONT.

Thank you for the opportunity to review your Draft EIR/EIS document. We look forward to reviewing your response to these comments and would like to receive copies of other comments received by your department on this document and your response to those other comments.

Should you have any questions please contact John Davis at (909) 793-3877.

Very truly yours,

Jim Busby

Jim Busby
Mayor

JB:RE:gjj

re.rcbsl

DOCUMENT 026
CITY OF VICTORVILLE
RESPONSE TO COMMENTS

Response 026-1

1. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMDs Air Quality Attainment Plan related to emission reductions for ozone precursors.

2. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response 026-2

1. Based on comments on the Draft EIR/EIS, subsequent analysis was completed regarding air quality impacts (Sections 4.4 and 5.4 of the Supplement). The subsequent analysis determined that the proposed action would have significant air quality impacts in the SEDAB after mitigation.

2. The Supplement also included a discussion of rail electrification (Section 5.4.3.2). Although it concluded that rail electrification solely to mitigate air quality impacts was not economically feasible, regional efforts are underway to implement measures to significantly reduce locomotive emissions. A recent study completed for CARB concluded that feasible and cost-effective control techniques for reducing locomotive emissions were available. These include:

    - Retarding injection timing and other engine modifications.
    - Selective catalytic reduction (SCR).
    - Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
    - LNG combined with SCR.
    - Electrification.

    Based on the proposed regulatory framework, allowable locomotive emissions per net ton-mile would be reduced by 80 percent between 1996 and 2003. ATSF is actively participating in the efforts to develop strategies to reduce locomotive emissions.

3. Mitigation with regard to transportation control measures were included in Section 5.4 of the Supplement and are listed in Table S.2 of this Final EIR/EIS.

Response 026-3

1. This comment interprets Section 5.7 of the Draft EIR/EIS to mean that the control of transport and mobile source air emissions are outside the authority of the MDAQMD. In responding to this comment, Section 5.7 was reviewed to determine the specific text being referenced by this comment. This review did not identify specific text in Section 5.7 that supports the interpretation supported by this comment.

2. Regardless of the comments interpretation, Section 5.7 of the Draft EIR/EIS addresses the air quality impacts associated with transport and mobile sources. In response to this and other comments, additional mitigation measures were included in Section 5.4 of this Supplement regarding stationary and mobile sources.

Response 026-4

1. See response 026-1 and 026-2.

Response 026-05

1. Sections 4.2 and 5.2 of the Supplement provided the results of follow-on analysis on the potential cumulative impacts of the landfill in conjunction with ground water pumping at the site. These sections summarized various studies which were conducted subsequent to distribution of the Draft EIR/EIS, including detailed settlement calculations based on a soils investigation conducted in September 1992.

Response 026-06

1. As stated in Section 3.2 of the Supplement numerous safeguards have been incorporated into the design of the proposed landfill to minimize the potential of gas and leachate migration from the waste body. These safeguards include a landfill gas collection system that includes both horizontal landfill gas collection system and a double liner design. The inclusion of a UZM (vadose zone) system would provide early and sensitive leak detection.

2. In the unlikely event of a breach in the liner, a release to ground water could be controlled through the installation of additional liquid and gas extraction wells. Construction of a grout curtain or cutoff wall downgradient of the landfill could isolate the release from contamination of ground water offsite. Because the contaminated area would be limited, the amount of ground water requiring pumping and treatment would be minimized. The zone of influence from wells used as part of a pump and treatment system would be limited and would not contribute significantly to ground settlement or subsidence.

Response 026-7

1. As stated in Chapter 12.0, the Draft EIR/EIS included the results of various onsite biological surveys and literature searches accomplished for the proposed action. These studies are available for public review at the County Planning Department and the BLM - Needles Resource Area as part of the Draft EIR/EIS.

2. As discussed in Section 4.5.2.1 of the Draft EIR/EIS, onsite botanical surveys were conducted to identify and map plant species within the proposed project boundary. No sensitive or protected plant species were noted during the onsite botanical surveys. Appendix G of the Draft EIR/EIS included plant species lists for the Bolo Station and alternative sites.

3. Data on wildlife species were gathered during several literature searches (including a review of the California Natural Diversity Database) and field studies, as described in Section 4.6 of the Draft EIR/EIS. As discussed, there are no threatened or endangered species resident on the Bolo Station site. Further, species diversity was noted to be significantly less during the field studies than had been anticipated from the literature review. Results of specific desert tortoise and kit fox field surveys were shown in Figures 4.6.4 and 4.6.5 of the Draft EIR/EIS. Other sensitive or protected species are neither known nor expected to occur on the site.

4. The literature search and onsite field surveys noted that the antelope ground squirrel (*Ammospermophilus leucurus*) is expected to occur in the vicinity of the Bolo Station site (although it was not observed onsite during field studies), and the round-tailed ground squirrel (*Spermophilus tereticaudus*) which was observed on the site. Neither species is listed as sensitive or protected. While these two species of squirrel are expected and/or were observed on the Bolo Station site, the protected Mohave ground squirrel was not identified as expected to occur either on the site or in the vicinity of the site by the literature search, and this species was not observed during onsite field surveys.

5. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

Response 026-8

1. The control of ravens and other bird species at the proposed landfill was discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations would be employed that are expected to be effective in limiting the attractiveness of the site to ravens and other birds. In the event ravens or other bird species are attracted to the site, various measures will be implemented on an as-needed basis to prevent bird populations from becoming established at the landfill. Section 5.6.5 of the Draft EIR/EIS included specific mitigation measures that would be implemented if ravens or other birds are found to be attracted to the site. These measures include, but are not limited to, the use of an overhead nylon line grid system (bird wires), distress tapes, propane cannons, and racket bombs. The effectiveness of these measures would be monitored and, if these measures are found not to be completely effective, additional measures would be developed by Rail•Cycle in consultation with BLM, USFWS, and CDFG.

2. In addition, Rail•Cycle, in consultation with BLM and USFWS, conducted a baseline raven study that included an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys during this 12-month period documented current raven (as well as other bird species) populations and usage patterns in the study area. Baseline data gathered as a result of this study will be compared to data collected during the operation of the proposed landfill. If comparison of data finds that ravens are being attracted to the site, or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented at the landfill in consultation with BLM, USFWS, and CDFG.

3. See Response 026-7 above, regarding the USFWS Biological Opinion on the desert tortoise

Response 026-9

1. The analysis of cumulative impacts was included Chapter 6.0 of the Draft EIR/EIS. Table 6.1 of the Draft EIR/EIS listed various projects in the area that were included in the analysis. The cumulative impacts of the proposed action and other projects in the area were addressed for various topical areas including, but not limited to, geology, ground water, mineral resources, vegetation and wildlife, air quality, land use, noise, transportation, land use, and socioeconomic impacts.

2. Mitigation measures included in the EIR/EIS for the proposed action also apply to cumulative impacts. The level of analysis and mitigation is considered adequate for identifying the expected cumulative impacts of the proposed action.

Response 026-10

1. See Response 026-2.

Response 026-11

1. Chapters 4.0 and 5.0 in the Draft EIR/EIS provided a comprehensive analysis of three alternatives to the proposed action: the No Action Alternative, the Reduced Action Alternative, and the Cadiz Valley Alternative site. Section 3.3 of the Supplement provided a clarified discussion of how project alternatives were developed, evaluated and selected for further analysis in the EIR/EIS. This discussion described the alternative site selection process and why alternative waste management practices and alternative disposal technologies were eliminated from detailed discussion in the EIR/EIS.

Response 026-12

1. The discussion of potential economic effects associated with the proposed action in Section 5.15.1.6 of the Draft EIR/EIS presented potential sources of revenues and costs that could result from construction and operation of the proposed landfill. A discussion of actual revenues/costs would be speculative at this time due to the number of variables that could affect the outcome. Such variables include, but are not limited to:

   - Volume of waste landfilled at the site on a daily basis.
   - Volume of waste, if any, diverted from other San Bernardino County landfills to the site.
   - Value of the per-ton mitigation fee negotiated by the County with Rail•Cycle.
   - Future tipping fees at San Bernardino County landfills.

   The analysis presented in the Draft EIR/EIS provided a basis for making a final cost/benefit determination when more specific information becomes available. CEQA (Section 15145 of the Guidelines for Implementation of CEQA) does not require speculation and allows the lead agency to terminate its discussion of a particular impact if the lead agency finds it to be too speculative for evaluation.

2. While not required by CEQA and not part of the EIR/EIS, the County Solid Waste Management Department is preparing a fiscal impact analysis regarding the potential fiscal impact of Rail•Cycle on the County's solid waste management system. The County's fiscal impact analysis would be considered by the County Board of Supervisors along with the information included in the EIR/EIS.

3. The discussion in the Draft EIR/EIS of the potential for the proposed landfill to have an impact on the County's ability to fund its solid waste management system, depending on which set of variables occurs, was made in the interest of full disclosure. This potential effect was identified as a significant impact in Section 5.15.1.6.2 of the Draft EIR/EIS. However, this impact could be mitigated through reimbursement to the County of a negotiated tipping fee (i.e., mitigation fee) from Rail•Cycle. The determination of how the funds collected as part of the mitigation fee would be allocated would

be made by the County. As reimbursements by Rail•Cycle are negotiable, the County would be able to incorporate compensation for project-related shortfalls into negotiated payments. The County has the ability to negotiate a fee structure with Rail•Cycle that would mitigate the potential impacts to its solid waste management system, thereby reducing this impact to below a level of significance.

4. A preliminary analysis of potential revenues that could result from the proposed landfill was conducted by Rail•Cycle utilizing 1992 dollars. This analysis evaluated the economic potential for the first 15 years of operation of the proposed landfill (Arthur Anderson, 1992). The upper range of the potential income, revenues and employment estimated by this analysis are as follows:

   - $268 million in mitigation fees to be paid directly to the County by Rail•Cycle.
   - $3.9 billion in overall economic activity including direct and secondary personal income, and direct and secondary goods and services purchased/provided within the County.
   - $850 million in new direct and secondary personal income.
   - Approximately 1,326 jobs during project construction and operation.

   While the results of the 1992 Arthur Anderson analysis of Rail•Cycle are considered speculative and for that reason not included in the Draft EIR/EIS, they have been provided in this response to provide general information.

Response 026-13

1. The analysis conducted for the Draft EIR/EIS did not reveal the potential for a loss of existing economic activity or a loss of growth potential as a result of the proposed action. The subsequent analyses of ground water and air quality impacts in the Supplement did not indicate either resource would be impacted to the extent that there would be effects to existing or potential economic activity in the region. Therefore, the factors used by the commenter to conclude that the three nearby operations (Cargill, National Chloride, and Pacific Agriculture CLC) would close in response to impacts from development of the Bolo Station landfill are not clear.

City of Hesperia
15888 Main Street, Suite 213 • P.O. Box 407000 • Hesperia, California 92340-7000 • (619) 947-1000

March 1, 1993

MAR 1993
RECEIVED

County of San Bernardino, Planning Department
385 N. Arrowhead Avenue, Third Floor
San Bernardino, Ca. 92415-0182
Attn: Mr. Randy Scott

Re: Comments on the Draft EIR for the Rail-Cycle Landfill

Dear Mr Scott:

Thank you for the opportunity to comment on the draft EIR. The following are Hesperia planning staff's comments on the EIR as well as comments submitted by the planning staff of the City of Victorville. The City endorses these comments, relating to air quality, water quality, endangered species, and economic impacts, and encloses them for your consideration. Additional comments include:

1. When operating at full capacity, the proposal would generate up to fourteen additional trains per day along Santa Fe rail lines. This represents a 70 percent increase in rail traffic. The County Air Pollution District's monitoring station within the City of Hesperia already reports non-attainment of current State air quality standards for ozone up to 100 days per year. Much of this is due to transported pollutants as the City is adjacent to the Cajon Pass. Increased rail traffic would adversely impact the City's ability to establish new industries and jobs in the High Desert and still meet State mandated air quality goals. ①

2. As explained in the summery and introduction, the Rail-Cycle project consists of solid wastes received from material recovery facilities (MRF's), transported by train to the landfill. Although the MRF's are not within the scope of the EIR, consideration should be given to the idea that creation of additional landfills may reduce the incentive for local agencies to finance and construct MRFs or to pursue other recycling programs. The focus of AB 939 is to reduce contributions to landfills, not create new landfills. Participation in these trash-by-train projects should be predicated upon a City or County's performance in achieving recycling goals, otherwise the only result will be to move trash to another remote location. ②

Councilmembers
Mayor Percy Bakker
George M. Beardsley
Michael J. Lampiognano
Theron O. Honeycutt
M. Val Shearer
City Manager D. J. Collins

3. The concept of the Rail-Cycle project assumes that seven MRFs will be served by the existing rail transportation network and that each MRF will serve a region. However, AB 939 requires that **each** County and City reduce landfill contributions and it does not preclude the possibility that an individual jurisdiction may approve a facility to serve its own needs. Further, it appears that the construction of regional MRFs could have significant impacts on operations and schedules of individual trash disposal companies within each region. For instance, a disposal company that formally hauled its trash to a local landfill may now have to transport trash across many miles of urban area to a regional facility. The impacts of such a change in the operation of these disposal companies is not covered in the EIR. CEQA requires that where an individual project is a necessary precedent for action on a larger project, with significant environmental effect, the EIR must address itself to the scope of the larger project. In lieu of this, the EIR must contain an explanation of the advantages of separating the environmental review of the MRF portion of the project from the review of the rail and landfill operations. ③

If you have any questions or need clarification on these comments, please contact my office at (619) 947-1200.

Sincerely,

Thomas K. Harp

THOMAS K. HARP
Planning Director

TKH:dr

enc.
ralcyc.ltr

DOCUMENT 027
CITY OF HESPERIA
RESPONSE TO COMMENTS

Response 027-1

1. This comment is correct in noting that Section 5.12.1.1.2 of the Draft EIR/EIS indicated that at full operation of the proposed Bolo Station Landfill (21,000 tons per day) a maximum of 14 Rail•Cycle trains (seven outbound and seven inbound) could potentially be routed on the rail corridor adjacent to the City of Hesperia. That number has been refined by Rail•Cycle and ATSF to a maximum of ten Rail•Cycle trains per day (five outbound and five inbound) that could pass through the City of Hesperia. The refined number of trains is based on the assumption that, of the seven MRFs that could potentially transport waste to the proposed Bolo Station Landfill, one could be in Victorville and one in the Santa Clarita Valley. Waste trains from these two MRFs would not pass through the City of Hesperia. The Supplement included revised analysis for air quality (Sections 4.4 and 5.4) and noise (Sections 4.5 and 5.5) based on the refined assumption regarding impacts associated with the waste trains.

2. This comment expresses concern regarding the mitigation of air contaminant emissions associated with the transport of solid waste by rail and site operations at the proposed Bolo Station Landfill. Based on this and other comments, supplemental mitigation measures for air quality impacts in the SEDAB were included in Section 5.4 of the Supplement.

Response 027-2

1. AB 939 incorporates various goals related to solid waste management, including source reduction and recycling. AB 939 also requires jurisdictions to assure 15 years of landfill capacity to accommodate wastes that cannot be reduced at the source or recycled. Therefore, for the foreseeable future, the availability of long-term landfill capacity will be an important part of AB 939 compliance. Compliance with the source reduction and recycling requirements of AB 939 is the responsibility of each jurisdiction. The availability of landfill capacity to meet the demonstrated need for ongoing landfill disposal of solid waste will not affect each jurisdiction's requirements to implement source reduction or recycling programs to comply with AB 939. Speculation as to the effect that construction of the proposed Bolo Station Landfill would have on local jurisdiction's willingness to comply with AB 939 requirements would be inappropriate in an EIR/EIS. However, it is reasonable to assume that the cities and the County will comply with AB 939.

2. Waste transported to Bolo Station would consist of post-recycled residual waste reflecting the AB 939 diversion programs implemented by the cities and counties from which the waste originates. As compliance with the requirements of AB 939 rests solely with cities and counties, it is anticipated that the cities and counties that may use Bolo Station would be in compliance with AB 939 with or without the assistance of the network of MRFs that may be part of the Rail•Cycle system.

3. Private projects such as Rail•Cycle can assist cities and counties in meeting AB 939 through contracts that provide specific services or components within the jurisdictions implementation program. For example, a city contracting with a Rail•Cycle MRF for processing and disposal of waste may negotiate a certain level of recovery for specific waste stream components. Such a contract may make Rail•Cycle responsible for a portion of the city's AB 939 diversion requirement and allow the city to demonstrate the 15-year disposal capacity requirement of AB 939. However, such a contractual arrangement does not relieve the city from its ultimate responsibility for compliance with AB 939.

4. As an owner/operator of a private landfill, Rail•Cycle has no control over the AB 939 compliance of a city or county that disposes of its waste at Bolo Station. While it is reasonable to expect that the MRFs through which the waste is processed would assist cities and counties in complying with AB 939, there are many variables beyond the control of the MRF or landfill operator that will determine the success of a jurisdiction's AB 939 implementation program.

5. Rail•Cycle provides the following resources that can assist cities and counties in complying with AB 939:
   - Assured disposal capacity.
   - Waste processing and recycling facilities.
   - Information useful in developing and monitoring waste diversion programs.

   Information that Rail•Cycle can provide for waste from MRFs that it controls includes total incoming waste volume, recovered volumes by recycled commodity, and residual disposal volume.

The type and detail of the information available would differ from MRF to MRF depending on the types of users and contractual requirements under which the waste is received.

Response 027-3

1. It is true that regional MRFs, if constructed, would likely change the status quo of solid waste collection and disposal patterns. The difficulty in siting and expanding existing landfills, combined with state-mandated recycling goals, has dictated a basic change in the solid waste management system. When a current landfill closes or restricts the amount of waste it can receive, haulers may have to drive longer distances and pay additional fees. The commenter suggests that one impact of regional MRF development may be increased haul distances. While this is possible, it is equally likely that the reverse may occur, depending on the location and size of facilities of an evolving system.

2. As the size, type and location of potential MRFs is unknown at this time, the EIR/EIS cannot reasonably anticipate or analyze the potential site-specific impacts that may be associated with those facilities. Only one MRF has been sited; others are currently in the planning stages and none are in operation. Each MRF is therefore appropriately subject to local permitting authority and site-specific environmental review and compliance.

3. To enhance public understanding of how a MRF might serve the proposed action, a description of a typical MRF is provided in Section 3.2.2 of the Draft EIR/EIS. However, inclusion of this general description should not be construed to mean that construction and operation of MRFs are a part of the proposed action. To date, only the MRF in the City of Commerce has been approved. Any effort on the part of the EIR/EIS to predict where additional MRFs could be located and to try to assess those impacts would be speculative and misleading. CEQA and NEPA do not require speculative analysis.

4. The EIR/EIS includes a programmatic analysis of up to seven MRFs as part of the Rail•Cycle system. The EIR/EIS evaluates impacts related to the transfer of solid waste by rail to the proposed landfill. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs to the proposed site were evaluated in the Draft EIR/EIS in Sections 5.7, 5.8, 5.12 and 5.13, respectively. Additional information regarding transportation and noise impacts along the rail-haul routes were included in Sections 5.4 and 5.5 of the Supplement.

5. As noted above, it would be speculative and misleading for this EIR/EIS to address the potential site specific environmental impacts associated with the construction and operation of undefined Rail•Cycle MRF locations. However, typical impacts that potentially could occur at a MRF located in southern California have been addressed in recent EIRs for two specific MRFs

   - City of Commerce MRF proposed by Rail•Cycle (David Evans and Associates, 1992).
   - West Valley MRF proposed by Kaiser/Burrtec in the City of Fontana (Chambers, 1993).

   The City of Commerce MRF is a Rail•Cycle project, whereas the Kaiser/Burrtec project is not affiliated with the project.

6. Based on the EIRs for the City of Commerce and West Valley MRFs, the following typical environmental impacts may occur from the construction and operation of other MRFs in southern California (David Evans and Associates, 1992; Chambers, 1993):

   - Onsite grading to prepare for the construction of structures, parking areas and roadways. It is anticipated that most MRFs would be located in existing industrial areas along existing rail lines. Therefore, natural landforms are not expected to be disturbed.
   - Southern California is subject to seismic activity and ground shaking. MRF structures would be required to conform to seismic standards included in the Uniform Building Code.
   - The sites would be covered with impermeable surfaces (i.e., structures and paved areas) that, depending on the specific site, would result in additional storm water runoff. Liquids from materials processed through the MRF and facility washdown water would be generated. Separate onsite surface water drainage and liquid/washdown water collection systems would be required to protect surface water quality.
   - The MRFs would result in short-term (i.e., construction) and long-term (i.e., operation) air emissions in an air basin (SCAB) that is nonattainment for certain criteria pollutants. This includes

increased levels of CO at roadway intersections from vehicular idling. Air emissions could be significant on both a local and regional basis. Various mitigation measures will be required to reduce the air emission impacts to the maximum extent practicable.

- Depending on the specific site, the additional truck traffic associated with transporting waste to the MRF could impact local traffic and circulations. Roadway and intersection improvements to maintain an acceptable LOS may be required.
- As it is expected that the majority of MRFs would be constructed in existing industrial areas near existing rail lines, land use impacts are not anticipated. Typical land use issues that would need to be addressed include, but are not limited to, zoning and General Plan land use designations, surrounding land uses, noise, odor, lighting, aesthetics, public utilities and services. Local jurisdictions would be responsible for assuring that land use issues are adequately addressed and that appropriate conditions of approval are established for each MRF.

As noted above, the site-specific impacts for each MRF will be addressed in EIRs prepared by the local jurisdiction.

Mojave Water Agency

MAR 1993
VED
BY

Transmitted by Facsimile March 3, 1993

March 3, 1993

County of San Bernardino
Planning Department
385 N. Arrowhead Avenue
Third Floor
San Bernardino, CA 92415-0182
Attn: Mr. Randy Scott

Re: Draft Environmental Impact Report /Environmental Impact Statement
Rail Cycle - Bolo Station Landfill
State Clearinghouse No. 91092020

In accordance with Mojave Water Agency Resolution No. 527-92, thank you for the opportunity to comment on the Rail-Cycle Project. The proposed project is outside the Agency boundaries, but its activities will have an effect on areas within the Agency's boundaries. The comments about the project deal with its impact on water quantity and quality within the Agency area. Primary issues are effects of the projects' transportation through the Agency, water exportation from within the Agency boundaries, and increased water use within the Agency.

On April 1, 1991, the Agency Board of Directors transmitted to the San Bernardino County Planning Director and other elected and appointed officials, a summary of current regional water supply issues which may impact availability of a long term regional water supply. The information available indicates that the project is likely to increase conditions of groundwater overdraft from new demand. As noted, the ability to secure a long-term water supply to meet the demands of this and other projects is uncertain at this time. This factor should be given careful consideration before making significant commitments to increase water use. ①

22450 Headquarters • P.O. Box 1089 • Apple Valley, CA 92307 • (619) 240-9201 • FAX (619) 240-2642

George R. Parker Division # 1
Elayne Joy Gaines Division # 2
Bill A. Christopher Division # 3
Anita M. Hahs Division # 4
Thomas H. Irwin Division # 5
Beverly J. Lowry Division # 6
John H. Russell Division # 7
Larry W. Rowe, P.E. General Manager/Chief Engineer

The Agency is concerned with the projects' effects on the groundwater within the Agency. Although the Draft EIR specifically deals with the overdraft of the basin underlying the project, the project will contribute to the overdraft of basins on the transportation route. The Draft EIR , Section 1.5 Summary of Potential Environmental Consequences states that, ②

> ".....it was found that potential environmental effects of the proposed action could be reduced below a level of significance with the exception of :
>
> - Groundwater supply related to incremental increase in the amount of water for onsite use withdrawn from an aquifer in overdraft.
> - Air quality related to continued exceedance in the project region of state particulate matter less than 10 microns in aerodynamic diameter (PM_{10}) standards, and the production of oxides of nitrogen (NO_X) and reactive organic gases (ROG) emissions in a nonattainment area for ozone.
> - Visual quality as a result of permanent alteration of the basin floor's natural topography, and in the development of a long-term industrial activity in the project area, which changes the passive character of the site. Incompatibility with the Open Space Element (scenic resources) of the County General Plan.
> - Incompatibility with land use goals and policies of the County General Plan.
> - Socioeconomic character of the area in that increased employment opportunities will draw population to the region, which would establish or reinforce the concentration of population in the area and accelerate consumption of local land and water resources."

Transportation Issues
The EIR states that solid waste transported from MRF's to the landfill using existing rail lines. Segments effecting the Agency would be :

- Bolo station to Amboy to the Eastern boundary of Township 8N, Range 4E
- Barstow to Boron, to Kern County Line
- Barstow to Victorville
- Victorville to San Bernardino, to the Western Boundary of Township 3N, Range 5W, located in the San Bernardino Mountains

The EIR also states that railcars may be stored within the ATSF facility at Barstow. (Section 4.12.2.1) The cars may also be switched at the Barstow Facility.

Integrity of rail cars and containers during transportation and storage, and safety of crossings in rural areas is a fundamental concern of the Agency. Groundwater protection from rail container run-off, accidental release and fire protection runoff is of basic interest to the Agency. ③

The existing rail lines run parallel or cross the Mojave River. The Mojave River and its drainage area are the primary source of water for residents and industry within the region. The project has the potential to contaminate or impact the younger alluvium along this water source. The younger alluvium of the Mojave River is the source of water from current recharge.

The suggested mitigation for this situation is:

- Participate fully in the support of local emergency hazardous material clean-up facilities, equipment and personnel;
- Establish a general clean-up procedure before potential contamination occurs;
- Participate in the funding of the purchase of replacement water if and when groundwater is contaminated within the Agency area.

Local Solid Waste Facilities Issues
The EIR states in 5.15.1.6.2, Solid Waste Management System, that there will be economic effects of diversion of trash from the County's landfills. The area ④

within the Agency will have a regulation compliant landfill for its use. The County's ability to fund its Solid Waste Management System would be considered a significant impact.

The suggested mitigation is to provide fees to San Bernardino County. The Agency asks that these funds be designated to bring existing San Bernardino County desert solid waste facilities into compliance, and to purchase water from the State Water Project to replace contaminated groundwater. ④ CONT.

Increased water use within the Agency
The Draft EIR in Section 6.15, Socioeconomics, states that there will be "increased water use to serve the population influx, primarily in the Morongo Basin and Barstow areas. This impact could be significant as existing demand exceeds or approaches supply and is creating the need to secure additional sources of water for these areas." The proposed project would be expected to participate in the areas that the project impacts.

The Mojave River area is currently undergoing an adjudication of water rights. In terms of this adjudication, the producer would be subjected to a replenishment assessment for the amount of water produced above the production allowance allowed in the judgment. It is assumed the water producer will pass these costs to its customers. The replenishment assessment will be used to purchase imported water for recharge within the Mojave River Area. ⑤

The Morongo Basin area has limited water resources. The Morongo Basin Pipeline will bring California State Water Project water into the basin for replenishment. The cost of this project and its water will be passed on through property assessment and water rates.

The Agency requests that a portion of fees imposed on the project proponent be transferred to the Mojave Water Agency for the specific purpose of regional water management planning and the purchase of supplemental water.

Exportation of water from within the Agency boundaries
The Agency's policy is that there will be no net loss of water through exportation from within the Agency boundary. The Agency requires a replenishment assessment be made to the Agency if any water is exported. The following are requirements for exportation of water from within the Agency boundaries: ⑥

- The water production facility will be metered with a device acceptable to the Mojave Water Agency. The Agency will be provided access to the production facility, at the Agency's discretion, for the purpose of testing or reading the metering device.
- Replacement water will be purchased to offset all water exported from the Agency.
- The facility owner/operator will provide quarterly reports to the Mojave Water Agency which detail readings from the metering device, and quantify the amount of produced, by month. Reports will be provided quarterly.

⑥ CONT.

Thank you for the opportunity to comment on the proposed project. Please contact Jo Ann Auerswald or Norman Caouette if you have questions about the provided comments.

Sincerely

Jo Ann Auerswald

Jo Ann Auerswald
Water Resources Program Manager
Mojave Water Agency

cc: Resource and Planning Committee

DOCUMENT 028
MOJAVE WATER AGENCY
RESPONSE TO COMMENTS

Response 028-1

1. As discussed in Section 5.15.1.5.2 of the Draft EIR/EIS, the proposed action is projected to result in population increase of approximately 500 individuals in Barstow and approximately 400 in the Morongo Basin. While these increases represent a minor change in the population for the two areas (i.e., approximately 0.02 to 0.03 percent increase over the 1991 population), the aquifers that supply these areas are either in overdraft (Morongo Basin) or close to being in overdraft (Barstow). The Draft EIR/EIS identified the additional demand of the proposed action of these aquifers as a significant unavoidable impact.

2. As suggested by the comment, the County Planning Commission and Board of Supervisors will take this information into consideration as they evaluate the proposed action. Should the County Board of Supervisors determine that the benefits of the proposed action outweigh the significant unavoidable impacts associated with the proposed landfill, they are required in accordance with CEQA to adopt a statement of overriding consideration.

Response 028-2

1. As discussed in Response 028-1, the proposed action has a significant unavoidable impact on ground water quantity. However, this impact is tied directly to the areas where employees and their families are expected to reside (i.e., Barstow and Morongo Basin) and not to the transportation route as suggested by the comment.

Response 028-3

1. Potential impacts to ground water due to spills, accidents or other hazards associated with rail operations were discussed in Section 5.8.1.2 of the Draft EIR/EIS. Although impacts are not anticipated, a communication procedure would be established so that the site environmental manager would be notified should railcars transporting solid waste from the MRFs to the landfill be involved in a mishap.

2. The mitigation measures suggested by this comment regarding Rail•Cycle's participation in the support of local emergency facilities, equipment and personnel, and establishment of emergency response plans and procedures are included in Section 5.8.5 of the Draft EIR/EIS. In addition, ATSF as the rail line owner/operator, has established emergency response plans, procedures, and personnel and equipment to respond to emergency situations that may occur during transport of waste to the proposed landfill. These existing ATSF procedures include notification and coordination with local emergency response agencies. No additional mitigation measures are required to respond to the suggestions made by this comment.

3. This comment also suggests that a mitigation measure be included to require participation by Rail•Cycle in the purchase of replacement water. As impacts to ground water quality are not anticipated from the rail transport of waste to the proposed landfill (see Section 5.8.1.2 of the Draft EIR/EIS), the mitigation measure suggested by the comment is not required.

Response 028-4

1. Depending on how the County chooses to proceed, a portion of the mitigation and user fees could be used to bring existing County landfills in the desert into compliance.

2. This comment suggests the use of these County mitigation fees to purchase water from the State Water Project in the event of ground water contamination from the proposed landfills. This would not be appropriate use of the County mitigation fees, rather, it would be the responsibility of Rail•Cycle under CCR Title 23, Chapter 15, Article 5 to implement a financial assurance mechanism to cover the cost of potential corrective action should the proposed landfill contaminate ground water. Such a financial mechanism must be established by Rail•Cycle as part of the WDRs that will be approved by the RWQCB.

Response 028-5

1. An increase in water demand in the Mojave River Area associated with Rail•Cycle would result from secondary demand due to additional population or commercial activity. The Draft EIR/EIS socioeconomic analysis assigned approximately 50 percent of site employees and secondary employment to the Barstow area. This resulted in a projected population increase of 502 persons (see Table 5.15.2 of the Draft EIR/EIS). It would represent a 2.2 percent increase in the City of

Barstow's population, and less than that to the extent the growth occurs in the unincorporated area surrounding Barstow, including Newberry Springs and other areas closer to Amboy.

2. The cost of providing water for general population growth, whether stimulated by the proposed action or other economic activities, is properly borne by the incremental consumers. Development fees for new residential or commercial uses within the Mojave River Area are a more appropriate financial mechanism than fees on out-of-basin employers who may create housing demand within the area.

Response 028-6

1. No water exportation from the Mojave River area would result from the proposed action. Water needs of the proposed landfill would be met by onsite wells from Bristol Basin. Potential adjudication of water rights in the Bristol Basin, resulting from an alleged overdraft condition would not impact the Mojave River area.

THE CITY OF
RANCHO CUCAMONGA

March 2, 1993

RECEIVED
MAR 1993

Mr. Randy Scott
Planning Department
County of San Bernardino
385 N. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182

SUBJECT: ENVIRONMENTAL IMPACT REPORT (SCH 91092020) BOLO STATION LANDFILL - A request by the Rail-Cycle Corporation and Atchison, Topeka, and Santa Fe Railway Company to develop 4,800 acres in the Mojave desert for a Class III municipal solid waste facility, 3 miles east of Amboy, California.

Dear Mr. Scott:

Thank you for the opportunity to comment on the combined Environmental Impact Report-Environmental Impact Statement for the subject project.

Phase I of this project would transport 3,000 tons a day of municipal solid waste (MSW) from a material recovery facility (MRF) in the City of Commerce to Bolo Station. At maximum capacity, this project would transport 21,000 tons a day of MSW from MRF's throughout Southern California (3-1).

The project will introduce 23 million cubic yards of MSW into the desert (3-2). It will create a 300-foot high mountain (3-23) visible from Route 66 (5.9-7). It will introduce a major new light and glare source into the desert (5.9-2).

Initially, the project would use one train per day (two trips) and at maximum capacity, seven trains per day (fourteen trips).

Some or all of these trains would pass through Rancho Cucamonga on the Santa Fe rail line adjoining 8th Street (3-11). However, according to SANBAG, Santa Fe and the Southern California Commuter Rail Authority (SCCRA) have entered into an agreement limiting freight traffic on the aforementioned tracks. ①

The City needs landfill capacity and supports the concept of a regional landfill. At the same time, we support complete review of all alternatives and options prior to a final decision on this project.

Further, local impacts may occur as a result of increased rail traffic. Therefore, staff requests that rail traffic impacts to the City be fully discussed, analyzed, and mitigated, as necessary, as a condition of project approval. ②

Mayor Dennis L. Stout
Mayor Pro-Tem Charles J. Buquet II
Jack Lam, AICP, City Manager

Councilmember William J. Alexander
Councilmember Diane Williams
Councilmember Rex Gutierrez

10500 Civic Center Drive • P.O. Box 807 • Rancho Cucamonga, CA 91729 • (909) 989-1851 • FAX (909) 987-6499

Alternative analysis requested

We request that the Bureau of Land Management carefully balance the tradeoff between the regional need for municipal solid waste disposal and the need for conservation of fragile desert habitat. ③

The need for a regional municipal solid waste disposal site is critical. The City recognizes that, in general, the current San Bernardino County Landfill system is no longer compatible with the urban population surrounding these facilities. Also, many of the landfills are antiquated and do not use state-of-the-art technology to mitigate the environmental impacts produced by these facilities.

Further, landfill capacity in San Bernardino is quickly diminishing as exemplified by this year's closing of Milliken Landfill. Therefore, the City is supportive of reducing the overall number of landfills operating in San Bernardino County and relying on state-of-the-art regional facilities. The subject project could serve the disposal need for the City and the County.

At the same time, all cities and counties are required to reduce their waste stream 25 percent by 1995 and 50 percent by the year 2000 as mandated by Assembly Bill 939. As required by law, the City is developing a waste reduction program to meet these goals. The City plans to meet the mandated 50 percent waste reduction requirement.

AB 939 also requires cities to determine their future waste disposal capacity need and plan for the landfill capacity for this need. Our analysis indicates that a desert municipal solid waste disposal site is needed. The subject project could fill this need.

The tradeoff is the loss of desert habitat, an existing regional resource, to provide a critically needed site for municipal solid waste disposal. To give maximum protection to desert habitat, we request that the location and number of regional landfills be a part of the environmental analysis for this project.

If waste stream analysis indicates that one landfill can serve the regional need for the next ten years, then the conservative approach for the Bureau of Land Management would be to approve only one desert landfill site. At the present time, the only other regional site in contention is the Eagle Mountain site in Riverside County. ④

The Bolo Station Site in San Bernardino County and the Eagle Mountain site in Riverside County should be stringently compared. To minimize the impact on the regional resource of desert habitat, the Bureau of Land Management could approve only the least environmentally damaging site needed to serve the regional need for municipal waste disposal. ⑤

029

Mitigation of project rail impacts on Rancho Cucamonga requested.

The EIR states that the maximum number of trains using the Santa Fe tracks through Rancho Cucamonga would be seven per day (fourteen trips). Please clarify to what extent the number of trips per day will be changed, if at all, by the agreement between Santa Fe and SCCRA. ⑥

The EIR, Paragraph 9, on page 5.12-6, says there is no significant impact caused by the 14 trip per day schedule, but the indicated increases in delay and the hazard index are significant. Delay is expected to increase by 192 percent and the hazard index to increase by 67 percent. Both of these increases are significant enough to require mitigation. ⑦

The EIR states that these impacts are the same as would be caused by normal population growth, except they will occur sooner because of this project. That statement is not logical and should be explained. The additional 14 daily trips crossing major streets in the City, added to the cumulative impacts of commuter train crossings, will require mitigation daily either by construction of grade separations or restricting MSW trains to very limited hours during late night or early morning. The latter mitigation technique would be of doubtful value to the City because the City would have no control over train schedules. Therefore, we request that this project be conditioned to contribute toward construction of grade crossings in Rancho Cucamonga. ⑧

In conclusion, thank you again for the opportunity to comment on the subject proposal. The City supports the concept of a regional municipal waste disposal site which is critically necessary to meet our landfill capacity requirement. We request that alternatives be carefully considered, and the least environmentally damaging alternative chosen. We also request that if 14 MSW train trips per day pass through the City, that the resulting hazard and traffic delay be fully mitigated.

Sincerely,

Rick Gomez
Community Development Director

RG/jfs

cc: Diane O'Neal, Management Analyst II
Joe O'Neil, City Engineer
Brad Buller, City Planner

DOCUMENT 029
CITY OF RANCHO CUCAMONGA
RESPONSE TO COMMENTS

Response 029-1

1. This comment is correct in noting that ATSF and the SCRRA have entered into an agreement regarding freight traffic on tracks passing through the City of Rancho Cucamonga. As noted in Section 4.12.1.2 of the Draft EIR/EIS, the rail line passing through the City of Rancho Cucamonga is known as the Pasadena Subdivision, which was recently sold by ATSF to SCRRA. As a condition of sale, ATSF has agreed to limit freight traffic on the Pasadena Subdivision. After 1993, freight operations by ATSF on the Pasadena Subdivision are scheduled to cease, with the possible exception of a maximum of four Rail•Cycle trains (two eastbound transporting waste from MRFs to the landfill and two westbound transporting empty containers back to the MRFs).

Response 029-2

1. The Commerce MRF and the majority of the future MRFs which could contribute waste to Rail•Cycle, would route trains via the San Bernardino Subdivision, which parallels Route 91, bypassing the City of Rancho Cucamonga (see Figure 4.12.2 of the Draft EIR/EIS). Currently, only one potential MRF may be sited in an area that would result in Rail•Cycle trains operating on the Pasadena Subdivision. At most, two future MRFs may be sited along this rail corridor. The maximum number of Rail•Cycle trains using the Pasadena Subdivision would be four trains per day (two outbound and two inbound).

2. The traffic and noise impact analyses documented in the Draft EIR/EIS represented an absolute worst case scenario, because the analyses did not consider the limiting of through freight operations on the Pasadena Subdivision. Sections 5.4 and 5.5 of the Supplement provided refined analysis of rail associated traffic and noise impacts. The results of this refined analysis supports the finding of no significant impacts, as stated in the Draft EIR/EIS.

Response 029-3

1. The purpose of the EIR/EIS is for various agencies, including BLM, to do just what this comment suggests (i.e., balance the tradeoffs between the regional need for solid waste disposal and the protection of the environment).

Response 029-4

1. A description of other regional landfills was provided in the Draft EIR/EIS (Section 2.1) and Supplement (Section 2.4).

2. The commenter's statement regarding the BLM's approval of only one regional waste-by-rail project is acknowledged. However, the approval or disapproval of a proposed project is not part of the EIR/EIS process. Rather, the decision makers for the lead agencies, including the BLM, will evaluate the information, in the EIR/EIS with other information, as they considered the actions that must be taken regarding the project. For example, the BLM must consider the amendment of the CDCA Plan, the issuance of right-of-ways across federal lands, and the exchange of public land for private land.

Response 029-5

1. See Response 029-4.

Response 029-6

1. Based on Rail•Cycle's refinement of its operating and location strategy for MRFs, and modifications by ATSF of its southern California operations to reflect the sale of the Pasadena Subdivision rail line to SCRRA, a maximum of two Rail•Cycle MRFs would be served by the Pasadena Subdivision. This results in a maximum of four Rail•Cycle trains per day (two outbound and two inbound), six days per week on the Pasadena Subdivision. In addition, by the end of 1993, ATSF will cease other through freight operations on this subdivision. Therefore, the maximum number of ATSF trains, due to through freight operations, would be the trains transporting waste from MRFs on the Pasadena Subdivision to the proposed landfill.

Response 029-7

1. A refined analysis of vehicle delay time at rail crossings was included in Section 5.4 of the Supplement. The findings of this refined analysis confirm that Rail•Cycle trains would not contribute to significant impacts in vehicle delay times at rail crossings on any of the rail segments between potential MRFs and the proposed Bolo Station Landfill.

Response 029-8

1. Refined analyses documented in Section 5.4 of the Supplement indicated that Rail•Cycle trains would not cause significant impacts to vehicle waiting time at rail crossings, nor would vehicle idling emissions at rail crossings constitute a significant air quality impact.

INTEROFFICE MEMO

County of San Bernardino

DATE: March 3, 1993 PHONE: 387-4655

FROM: PAMELLA V. BENNETT, DIRECTOR
Department of Environmental Health Services

TO: RANDY SCOTT
Planning Department

SUBJECT: RAIL CYCLE/BOLO STATION LANDFILL
DRAFT EIR/EIS COMMENTS

The following are the Department of Environmental Health Services Comments to the draft EIR/EIS for Rail Cycle/Bolo Station Landfill.

SECTION 1.0 - SUMMARY

Specific comments to the summarized conclusions contained this section are provided in this report. Also note, general or all-encompassing statements should be avoided as a point of reference in the substantiation text in support of the project. Thus, "...as needed; as required; or as necessary..." declarations should be removed or re-phrased to more adequately reflect specific individuals and/or agencies responsible for making the appropriate determinations, based on need. ① Comments provided in the process of reviewing the DEIR/DEIS may dictate changes prescribed by the need for further clarification that may ultimately mandate a revision to this "Summary Section", in whole or in part, in the Final EIR/EIS. ②

SECTION 2.0 - INTRODUCTION

PAGE: ITEM: REMARKS/COMMENTS:

2-2 Item 2.1.7 - Another project to receive waste-by-rail should be mentioned. Reportedly, Muht-Hei, Inc. and Mid-American Waste Systems, Inc. have proposed to locate a landfill upon lands of the Campo Band of Mission Indians (CBMI) in southcentral San Diego County to receive waste-by-rail from greater San Diego and other unspecified Southern California locations. Waste would primarily arrive upon tracks of the San Diego County Transit Authority (including approximately 20 miles passing through Mexico). The Campo Environmental Protection Agency (CEPA) of the Campo Band reports it has tentatively approved the project pending the Bureau of Indian Affairs' (BIA) - Record of Decision on the NEPA-EIS/Request for Authority to Construct/Request for Permit to Operate. ③

2-8 Item 2.6.4.1 - The CDCA Plan discussion should be updated in the Final EIR/EIS, in the context of the recent U.S. Senate introduction of the California Desert Protection Act (SB 21) by California's U.S. Senators. The resulting changes that could occur in U.S. Government desert land use policy within San Bernardino County are a matter of considerable controversy and concern regarding potential local economic losses. Potential implications to this proposal by this senate bill should be analyzed in the FEIR/FEIS. ④ ④ CONT.

SECTION 3.0 - DESCRIPTION OF PROPOSED ACTION & ALTERNATIVES

PAGE: ITEM: REMARKS/COMMENTS:

3-3 Item 3.2.2 - The absence of details pertaining to the operation and control of out-of-county MRFs serving the Bolo Station Landfill creates questions as to potential conflicts among Rail-Cycle's stated goals. Each MRF is expected to support AB 939 goals without jeopardizing the amount of residual waste (3,000+ tons/day) sufficient to justify their: railside location, ability to furnish full trainloads of waste and bear a pro-rata share of the capital/operational expenses at Bolo Station Landfill.

At some future point, Rail-Cycle's MRFs could be too aggressive and "successful" in the diversion of waste to recycling markets and leave insufficient residual waste to justify railhaul costs and the need for such a large scale landfill. Table 3.2, on page 3-6, projects a figure of 28% of recyclables from the wastestream supply at the MRFs. However, no narrative is presented explaining how aggressively Rail-Cycle MRFs intend to achieve or exceed this projection in order to continue to guarantee viability. ⑤

A loss of tipping fees would require the County to endure additional financial impacts in order to compensate for the loss of such revenue for required closure/post-closure mandated regulatory activities that would still be required to occur, but without adequate funding in the absence of these fees. In view of SBCo's potential economic vulnerability in these areas, mitigation adverse impacts should be analyzed in a Fiscal Impact Report, perhaps as a technical Appendix/Attachment to the Final EIR/EIS. ⑥

3-13 Item 3.3.2 - Although the LANDFILL ELEMENT of the draft EIR/EIS contains portions of the required Report of Disposal Site Information (RDSI) document, most details required to be present in the RDSI document are absent. This absence, combined with minimal consultation with the LEA, leaves this section in need of further discussion.

In addition, the project proponents have not submitted the aforementioned draft RDSI to LEA. Without this document, the LEA's ability to effectively evaluate this portion of the draft EIR/EIS, is limited. The project proponents are encouraged to follow the RDSI format suggested in the CIWMB Permit Desk Manual (June/1992 edition) in the formulation of the RDSI document. ⑦

The DEIR/EIS lacks details of a hazardous waste screening/exclusion program at non-San Bernardino County MRFs serving the project. As these non-county MRFs are beyond control of DEHS, the absence of details is of concern to the LEA staff. ⑧

There is a clear need for expanding the availability of household hazardous waste drop-off facilities and round-up events for communities being served by the Rail-Cycle MRFs. The projected costs for loadchecking/exclusion programs and the expanded availability of drop-off facilities/round-up events cannot be considered to be insignificant. No disclosure or discussion of ultimate responsibility for payment of costs incurred for such programs is included within the text provided. How San Bernardino County is to be assured that other jurisdictions beyond its control will diligently carry-out such expensive programs needs to be explained. ⑨

3-15 Figure 3.3 is somewhat incomplete since it focuses only on Rail-Cycle urban routes, ignores other identified waste-by-rail proposals' rail line routes (i.e. Eagle Mountain Landfill, etc.) and also overlooks urban San Diego railhaul routes. It is assumed that all such rail haul routes will not have a collective/cumulative effect on this proposal. ⑩

3-22 Figure 3.7 and Figure 3.8 final cover configurations and the page 3-25 final cover narrative are inconsistent with the superior VRM system bent form line described under 5.9 - Visual Resources - and graphically well-demonstrated in Figures 5.9.2 (page 5.9-5) and 5.9.3 (page 5.9-7). The Figures should be revised to be consistent throughout the document. ⑪

3-31 Item 3.3.2.1.3 - The described working face widths of 300 feet (at 3,000 tons/day) and of 600 feet (at 21,000 tons/day) seem excessive (even in view of 6-11 modified "Hostler" self tippers being present - see Table 3.7/page 3-61). These figures appear to be in potential violation of Title 14 CCR Section 17676 (Confined Unloading of Solid Waste) and as it pertains to adequacy of repair and monitoring of deteriorating conditions/maintenance of landfill sites. The difficulty in managing such vast active working areas have the potential to exacerbate problems normally associated with a landfill site. These issues include but are not limited to: ⑫

- increased off-site wind-blown litter;
- greater attraction of ravens to the working face;
- other vectors attracted to food waste residues exposed (and/or as yet, uncovered), and;
- increases in PM-10 (fugitive dust particulates) production during the normal operating procedures of the application of periodic/daily soil cover material.

Subparagraph 4. - Text incorrectly references RWQCB as the authority to allow alternative daily cover. The statement should be corrected to reference the LEA as the authority, with concurrence rendered by the CIWMB. It should also be noted that the experimental use of synthetic daily cover materials at landfills in Southern California to date has been largely unsuccessful. ⑬

3-32 Figure 3.10 - The proposed height stated in the text (15-20' maximum) of falling waste above the ground surface by a track-mounted tipper could be a factor in the increased potential for off-site wind-blown litter particularly during the daily periods of high winds. A High Wind Closure Plan is not outlined in the draft EIR/EIS text. Thus, the control of site closure would appear to rest solely on the subjective decision of the owner/operator. A High Wind Closure Plan should be included in the EIR/EIS. ⑭

3-37 Fig. 3.12 - LEA staff question the effectiveness of a Leachate Collection System that has collector lines 300' (on center). A breach in the integrity of the liner system could, theoretically occur either by the effects of differential settlement or actual piercing by the repeated compaction and massive weight of the waste itself. How are any structural failures to be handled in the event of liner compromise if these were to occur in the centerpoint expanse between the 300' collector lines? The repair of any such breach in the shielding membrane/liner would appear to be extremely difficult (if not cost prohibitive and unfeasible), particularly when large quantities of waste have already been deposited on top of the liner membrane layer(s). ⑮

Additionally, a 2% fall in grade appears to be insufficient, in the case of liner breach, to "surface carry" the leachate (and the hazardous constituents generated) to the collectors at 300'(on center). Would the leachate be more likely to percolate down into the subsoil (by gravity factors alone) rather than across the collection surface to the nearest collector point, as far away as 150'? What effects would differential settlement, of the refuse/soil cover layers, have on the proposed final closure cap's 2% cross grade in adequately handling surface drainage and effectively eliminating ponding of the occasional heavy torrential rains? Expand/explain in appropriate accompanying text in the final EIR/EIS. ⑯

On Detail "A" both the "Extension of 150' Unlined Drainage Channel (Future)" and the "Runoff Retention Spillway" are designated to be the same item; is that correct? Is this area intended to serve a dual purpose? If so, additional rationalization text would need to be provided, as this issue is unclear, as shown in this draft EIR/EIS. ⑰

3-41 Col.2/Item 2 - No mention is made of other toxic gases that are commonly found as components in the LFG concentrations found in a typical Class III landfill, such as proposed. The assumption is made that only "organic compounds" will be present once decomposition occurs; what about the mixing of common household chemicals and the possible toxic effects of the resulting chemical recomposition (i.e. Chlorine bleach & Ammonia)? ⑱

3-45 Nuisance Issues - As previously discussed, the 300 to 600 foot wide working faces are likely to exacerbate, not diminish, nuisances such as but not limited to: unsightliness, fugitive dust, odor, wind-blown litter and increased attraction of ravens/vectors to the working face/site. ⑲ The referenced litter control team (described at Table 3.6 on page 3-58 as 2 personnel) with only one?/two? litter pickup truck(s) available (unclear from table 3.7 - page 3-61) is very likely to be routinely overwhelmed by the amount of litter ⑳ blowing about the site, trapped upon on-site litter fences and potentially blowing off-site. ⑳ CONT.

Insufficient details are provided in subparagraphs 3. and 5. regarding litter and raven/vector controls (page 3-34). ㉑

At a minimum, portable and stationary litter fences, more litter control personnel (with several pickup trucks), high-wind special dumping areas and high-wind closure policies/plans are likely to be required for this site to effectively control litter and to avoid greater attraction of ravens/vectors to the area. The wind rose of figure 4.7.3 shown on page 4.7-7 demonstrates the occurrence of variable winds and wind gusts in excess of 10 knots at the project site. Such winds are easily sufficient to create difficulties in controlling litter problems. ㉒

In view of the litter and raven/vector control problems that can be anticipated at this location, the referenced three-strand barbed wire should be replaced by a chain link or wire mesh litter control fence at the perimeter of the entire Bolo Station facility. This would be in addition to the proposed 6 foot chain link fence around the current active cell. Considering the threat to the Desert Tortoise in the event of greater raven attraction, and of increases in local raven flocks, field studies documenting the purported efficacy of the stated raven control measures should be provided in the final EIR/EIS. ㉓

Ravens at landfills in San Bernardino County have been observed to routinely and quickly peck through both thin soil cover (6" cover) and apparently tough synthetic alternative cover material (as documented in a SBCo Solid Waste Management Department "Fabrisoil" 30-day pilot project). Project proponents should also explore what regulatory authority may be required to kill persistent nuisance ravens to the extent that indirect control measures prove to be insufficient. ㉔

3-49 Subparagraph 7. should provide adequate details of how ravens and vectors will be prevented from feeding or being attracted to food residues/washwater at the container washing operation described. ㉕

3-51 (See above) Ravens for the equipment wash area of the landfill maintenance area and of the public drop-off facility.

3-59 Item 3.6 - The **CLOSURE/POSTCLOSURE PLAN** narrative omits reference to the need for Preliminary Closure/Postclosure Monitoring and Maintenance Plans to be submitted to and approved by the LEA prior to/concurrent with the SWF Permit application submittal. The application package also needs to have CIWMB's approval of the funding mechanism for closure of cells and of the site, prior to CIWMB's consideration of concurrence with the LEA's proposed SWF Permit. ㉖

3-63 Item 3.7 - **PROJECT ALTERNATIVES** text omits discussion of a transformation (waste-to-energy) facility alternative upon the Bolo Station site (or elsewhere in or out of SBCo upon ATSF properties appropriately adjacent to tracks). The discussion should ㉗

explain what/why disadvantages outweigh potential advantages of such alternatives, including but not limited to:

- diminished need for several sections of land and land acquisitions
- absence of buried MSW and of LFG emissions;
- extremely low air emissions from recently improved wet-scrubbers and other BACT;
- reduction of litter/raven/tortoise MSW landfill nuisance issues;
- higher energy recovery than for LFG

㉗ CONT.

3-68 The narrative on Regional Alternatives, Figure 3.18 and Table 3.8 - all omit reference to the Campo railhaul project in San Diego County. ㉘

SECTION 4.0 - AFFECTED ENVIRONMENT

PAGE: ITEM: REMARKS/COMMENTS:

4.2-1 Item 4.2.1.2 In the absence of considerable field data (resulting from the relatively few and shallow wells and test borings present at the site and in an absence of the locations and depths of known unconsolidated alluvial sediments surrounding and located in the Bristol Dry Lake), largely unpredictable differential settlement could be reasonably expected beneath the landfill over time.

This fundamental critical unknown could also be exacerbated by: some contiguous points of consolidated sediments and/or of some shallow bedrock (i.e. points of little settlement becoming foci of tension/shear and disruption of the liner and associated systems, as surrounding areas settle); by the massive weight of deposited waste/soil fill/cover material (and combined with the additional weight from significant precipitation events that may quickly penetrate sandy daily cover), by groundwater/brine displacement, by fluctuations in the cone(s) of depression under and near the site from the Cargil (Leslie Salt) brine wells, by unknown hydroconnectivity of aquifers; and by related factors. ㉙

The merits of the liners/leachate and LFG control/extraction/monitoring systems are critically dependant upon predictability of acceptable tolerances and the near absence of differential settlement beneath such systems. The apparent unknowns of such potential settlement must first be satisfied before the merits of potentially superior control/monitoring/extraction systems can be evaluated.

4.3-5 Item 4.3.3.1.2 - Subparagraph 1. Text omits an important and needed discussion of the site's actual/perceived threat of harm to the Cargil brine production wells. Cargil identified several significant threats of harm to the quantity/quality of production plus the additional and perhaps more important, perceived threat of significant contamination to the food-grade calcium salts obtained from the brine. ㉚

4.4-1 Item 4.4 - (Regarding this narrative on groundwater issues, see previous discussions of settlement and brine unknowns.)

4.4-19 Figure 4.4.7 (See previous discussions of unknowns pertaining to hydrogeological settlement and brine issues.)

4.4-25 Figure 4.4.8 (See previous hydrogeological discussions.) ㉛

4.4-30 Figure 4.4.9 (See previous hydrogeological issues.)

4.4-32 Figure 4.4.10 (See previous hydrogeological issues.)

4.4-33 Figure 4.4.11 (See previous hydrogeological issues.)

4.4.35 Figure 4.4.12 (See previous hydrogeological issues.)

4.6-1 Item 4.6 - **WILDLIFE** - The discussion omits the landfill/raven/tortoise linkage issue and to what degree local raven populations (a non-endemic species in the north desert region) may have "created" and continue to "maintain" the existing local Category 3 tortoise habitat at the project site by their previous and continuing juvenile tortoise predations. ㉜

4.12-10 ATSF's stated ability to restore temporary loss of track use and/or an ability to use alternative routes, should be updated and confirmed with details of their response to the reported double track washout in the vicinity of Hesperia in early January, 1993. ㉝

4.14-1 Item 4.14 - **LAND USE** - Text should be updated, accordingly (as previously discussed in the context of the introduction of the California Desert Protection Act). ㉞

4.14-3 AB2296 is not clearly defined. Add "the approval of 50% of the County's population with a majority of the 24 city's is required prior to the General Plan Amendment identifying Bolo Station as a landfill on the Improvement Overlay maps. ㉟

4.14-13 Item 4.14.2.1 - **REGIONAL LAND USE** (See previous discussion).

4.14-15 (3) Local Land Use The Federal Land Exchange/Amendment Process needs to be elaborated on, since this may be a serious issue that would require mitigation(s) if denied by the Federal Government, eg. Eagle Mountain and Ward Valley Projects. ㊱

4.14-15 Mineral Extraction Delete last paragraph due to duplication "Brine is withdrawn..." ㊲

4.15-3 Footnote 2 of Table 4.15.1 - Text should note that Joshua Tree and Morongo Valley are unincorporated communities. Under footnote 4, correct spelling: Lander to Landers. ㊳

4.15-9 Table 4.15.5 - The Twentynine Palms Marine Corps Base military/employee estimated figures appear to be too low based on discussion of anticipated projections (both transient and permanently stationed personnel) and observations made by the LEA inspection staff with base personnel. Please verify population numbers with base administration and if necessary, revise figures and expand/explain additional numbers, accordingly, in the Final EIR/EIS text. ㊴

4.15-10 Firefighting Services (4.) Hazardous Material response is not the responsibility of the County Forestry and Fire Warden, but is an inter-agency response. Identify involved agencies in the EIR/EIS. ㊵

SECTION 5.0 - POTENTIAL ENVIRONMENTAL IMPACTS

PAGE: ITEM: REMARKS/COMMENTS:

5.2-3 Item 5.2.1.2.1 - Ground Settlement Due to Loading on Foundation Soils - Expand/explain with adequate substantiation text, in the final EIR/EIS document (see previous discussion of settlement unknowns).

5.2-7 The estimate of long-term settlement potential of 1-14 feet needs better explanation of how the figures were derived. The differential settlement potential also needs careful study and definition in this section with reference to previous discussions. Discussions of how the liner/leachate and LFG detection/monitoring/control systems will survive defined over-all settlements and defined differential settlements are missing from the DEIR/DEIS text. Detailed explanations supported with statistical confidence limits are a requisite to qualify statements. In particular, compressible unconsolidated soils seem likely near the southern side, SW corner and in those areas where the existing brine production wells produce a cone(s) of depression beneath foundation soils under the planned SW corner waste cells. Analyze potential adverse impacts and explain with adequate substantiation text in the final EIR/EIS document. ㊶

5.2-8 Figure 5.2.2 (See above - settlement issues).

5.2-9 Ground settlement due to groundwater withdrawal
(2) Continuation of withdrawal/(pumping) with settlement in the southwest section could reduce mineral resource capacity and recharge. ㊷

5.3-1 Item 5.3 **MINERAL RESOURCES** - (and 5.3.1.1 Brines - see previous discussions of threats to salt brine wells.) ㊸

5.4-3 Item 5.4.1.2.2 - Quantity and Concentration of Brines at Existing Wells and 5.4.2.3 Ground Water Contamination (see previous brine/settlement unknowns). ㊹

5.4-4 Leachates - (See previous settlement/brine contamination threats.) ㊺

5.4-5 **Landfill Gas** - (See previous settlement/brine contamination threats.) ㊻

5.4-7 Groundwater usage - add a mitigation measure; ex. purchase or acquire supplemental water for recharge into the overdraft groundwater basin (Cadiz and Bristol Basins). ㊼

5.8-5 **Nuisance Vectors, Litter, and Odors** - (See previous nuisance discussions.) ㊽

5.8-5 Address the potential for insect/nuisance vectors introduced to the agricultural zones, (1,400 acres), i.e. fruit flies, flies, mosquitoes, etc. ㊾

5.9-1 5.9 **VISUAL RESOURCES** - An additional amount of substantiation text is required in order to mitigate the long-term adverse impacts to aesthetic factors, to a level of non-significance (pursuant to CEQA Guidelines; see previous discussions). ㊿

5.13-1 Noise (2) change 65dBA to 60dBA to be the maximum...(3) change two to three general noise sources. Also, noise becomes more significant at night (10 p.m.-7 a.m.) and the significant criteria might have a range and not set at 3dBA.

The number of trains needs to be stated more directly, 1 train = 3,000 tons/day -- 7 trains = 21,000 tons. (51)

Also, in table J.1 and J.3 is there any variation in noise generated based on empty versus loaded containers?

5.13-5(1) Railroad Corridors

Using the County's General Plan Noise Element Table 1 for Ldn Contours along rail lines (1987). Daily train counts are 19 on the Daggett to Cadiz segment. An additional 7 trains per day is a 36% increase and should be addressed for each segment. (52)

5.14-2 **LAND USES (POTENTIAL INCOMPATIBILITIES)** Item 5.14.1.2 - Compatibility with Existing and Future Land Uses appears to inappropriately downplay fundamental incompatibilities in adjacent land uses.

The potential exists for the generation of adverse environmental impacts emanating from the project without any requirement for full disclosure of the environmental threats to adjacent/contiguous lands. These lands cannot be assumed to be without potential for "re-zoning" to residential land uses at some later date if the local population is increased merely by the site's employees. The development of a solid waste management facility itself poses incompatible land uses with the existing BLM, Class L land use designation and thus, poses inconsistencies with the goals and policies of the Federal/BLM CDCA Plan (text item 4.14.2.2.1, subparagraph 3, page 4.14-15). (53)

Narratives in the DEIR/DEIS imply that because most adjacent/contiguous parcels are now vacant, they can reasonably be expected to remain vacant for not only the active filling life of the landfill (60-100 years), but also during the additional 30 years (minimum) of significant LFG production and of closure/post-closure maintenance. The history of non-occurrence (the past/current vacancy of these land parcels) is repeatedly cited as a logical and adequate substantiation for a "No Impact" determination/finding under numerous DEIR/DEIS categories and text items. (54)

A discussion in the appropriate sections of the text (including section 4.14-1) should address (at least) an attempt to agree to a full disclosure at some future point when any neighboring development is proposed.

SECTION 6.0 - CUMULATIVE IMPACTS

PAGE: ITEM: REMARKS/COMMENTS:

6-1 **6.0 CUMULATIVE IMPACTS** - The current expansion of the mission of the Marine Corps Air Ground Combat Center (MCAGCC) at Twentynine Palms is not mentioned. Currently, the expansion is scheduled to include the permanent relocation to MCAGCC of several thousand Marine Corps/Navy personnel over the next several years. This is in addition to tactical vehicles/aircraft/artillery/tanks/other tactical and support equipment and families of the service personnel/civilian vehicles. (55)

In conjunction with the proposed expansion are additional increases in numbers of reservists and temporary service personnel/tactical equipment involved in short-term training missions throughout the year. How commensurate increases in MCAGCC tactical/field operations will be likely to create negative environmental impacts should be addressed. Particular attention should be given to the potential for field maneuvers/tactical activities that could exacerbate cumulative 24-hour and annual standard PM-10 emission threshold limits in the region. Chapter 6 should also briefly consider (as previously stated) the foreseeability of cumulative negative environmental impacts/conflicts and incompatibility of regional land uses. (56)

6-5 6.2 Geology & Soils - Text reference: "...No significant cumulative impacts with regard to geology are expected from the proposed action and other projects in the area..." There are several of the projects outlined in Table 6.1 for which the County of San Bernardino has not rendered full approval. In fact, various SBCo Departments' staff are currently conducting the various projects' environmental document's review processes. (57)

There have been some serious concerns raised over the geologic formations at several of these sites and the potential impacts from the new Holocene Fault locations are currently being studied, but not yet accurately identified. Thus the determination that there are no impacts associated to or from geologic formations is, at this time, premature.

6-7 6.8 Public Health & Safety

Mitigation to the Cumulative Impacts of HVR, Broadwell, and Ward Valley may have a trust fund established and maintained for 2(HW Certified) DEHS Staff either in Victorville, Barstow or Needles. (58)

Also, an MOU or agreement with DEHS for a Household Hazardous Waste Program Plan may be entered into with Rail Cycle for services provided, i.e., planning, monitoring and/or remediation. (59)

SECTION 7.0 - OTHER REQUIRED CONSIDERATIONS

PAGE: ITEM: REMARKS/COMMENTS:

Absent any Federal or State mandated requirements of full disclosure by private developers to neighboring areas, if the proposed landscape revegetation effort is successful enough, any future private development group could effectively "mask" the fact that a solid waste facility ever existed. Therefore, a cursory discussion should be provided in the FEIR/FEIS as to the potential for any future alternative land uses for the surrounding lands and any resulting conflicts that may arise if full disclosure (of this site in the post-closure phase) is not adequately addressed. (60)

SECTION 10.0 - LIST OF PERSONS CONTACTED

PAGE: ITEM: REMARKS/COMMENTS:

10-1 County of San Bernardino - section: The Department of Environmental Health Services through its Local Enforcement Agency (for solid waste management) Section (DEHS/LEA) as the Regulatory Responsible Agency (pursuant to CEQA) should have been included in this list. The LEA is the public agency entrusted to issue the Solid Waste Facilities Permit (SWFP), with concurrence provided from the California Integrated Waste Management Board (CIWMB), for the operations of this proposed facility. (61)

The preliminary review of the environmental document package (all CEQA documents) prior to certification of the final EIR is an essential and integral part of the SWFP review process. The certified FEIR/FEIS must be used by the LEA as a component of the SWFP application (in the land use conformance requirement). Therefore, all issues raised by the LEA in any preliminary and final reviews of this document that may be deemed not "adequately addressed" may become a condition of approval of the SWFP at the time the permit is formulated and issued. (62)

SECTION 11.0 - DISTRIBUTION LIST FOR DRAFT EIR/EIS

PAGE: ITEM: REMARKS/COMMENTS:

11-2 Column one - Under San Bernardino County Department of Environmental Health Services, also add the Local Enforcement Agency (LEA) for Solid Waste Management; for any future distribution including the final EIR/EIS. (63)

SECTION 12.0 - REFERENCES AND RESOURCES

PAGE: ITEM: REMARKS/COMMENTS:

12-2 Table 12.1 - This section should also include a reference to the 1990 United States Bureau of Land Management (US-BLM) Raven Management Plan and associated EIS. This study documented how numerous landfills in San Bernardino County have apparently helped to stabilize local raven populations, a non-endemic species to the north desert region. The study outlines how additional food sources typically available in discarded municipal waste streams have allowed ravens to expand their range into remote desert areas with increased predation upon threatened juvenile desert tortoises. (64)

APPENDIX A: NOTICE OF INTENT AND INITIAL STUDY

SECTION A.3 - COMMENTS ON THE NOTICE OF PREPARATION

The City of El Segundo Comment Letter:

It appears that the City of El Segundo has not yet approved the two proposed MRFs within their city limits. It also seems that these MRFs were only informally presented to the city council as a courtesy introduction to the overall project. Thus, the project proponents' dependance on these MRFs for viability of the "front end" of this project might require supplementary assessment. (65)

Fire Warden's "redi-letter" Comments:

The Jim Rankin note states that the nearest emergency fire response center (Harvard; fire station, #46) is approximately 1 1/2 hours away. Is it to be assumed that the new fire sub-station will have a paramedic response unit? (66)

APPENDIX B: LIST OF PERMITS/APPROVALS REQUIRED

B-1 Appendix B - Add the following approval under county listings: "Site Identification and Description" - "LEA" - "PRC §50000 LEA Site Identification and Description Certification." (67)

NOTE: Although various narratives throughout this DEIR/EIS reference a need for compliance with AB 2296 requirements, the process is not adequately summarized. There are two separate and distinct processes (Pursuant to PRC §50000) involved for - 1) The Landfill, and; 2) For each of the individual Rail-cycle MRF sites:

1) The Bolo Station Landfill Solid Waste Disposal Facility:

> The County Board of Supervisors and a majority of cities/towns having a majority of the incorporated population within the county will have to approve, by resolution, the "Site Identification and Description" siting the Bolo Station Landfill Site as it is a new facility not identified in an approved CoSWMP.

2) The individual Rail-cycle MRF sites:

> A separate "Site Identification and Description" siting the individual MRF facility sites to be located within the county/city/town will be required to be sent to that county's Solid Waste Advisory Task Force (SWATF) for review and comment (for all new facilities not identified in the last approved CoSWMP/CIWMP for that county).

NOTE: This approval is also a requisite of the SWFP application package. Therefore the project proponents' should be aware that this process must be completed prior to the applicable LEA formulating/issuing the SWFP required for the operation of the facilities. (68)

APPENDIX C: FAULT AND SEISMIC DATA

The LEA's comments on this section will be deferred to the SBCo Geologist/Environmental Management Group/Building & Safety Department for additional input regarding any potential impacts that may alter the site with respect to the new faults/seismic studies/new test information as a result of the 1992 Landers/Big Bear Earthquakes. The results of any such findings should be incorporated in the appropriate sections and final observations and comments to be included within the Final EIR/EIS, prior to certification by the SBCo Board of Supervisors.

APPENDIX D: CALCULATION OF SODIUM CHLORIDE QUANTITIES IN GROUND WATER

See comments regarding the "perceived threat" as provided for page 4.3-5, above.

APPENDIX E: U.S. ARMY CORPS OF ENGINEERS LETTER

No Section 404 Permit for discharge onto US waters is required by the US Army Corps of Engineers, thus no additional requirements will be issued by the LEA in the SWFP regarding this matter. (69)

APPENDIX F: GROUND WATER CONSTITUENTS OF CONCERN

Continuous groundwater monitoring using drilled probes for sample data, with number and placement as determined by the Regional Water Quality Control Board (RWQCB), will be employed around the site prior to operational status being achieved. Continuous monitoring of these groundwater constituents typically found under/around landfills will be done with results of test data provided on a quarterly basis in a technical report. (70)

APPENDIX G: WILDLIFE AND VEGETATION SPECIES LIST

Table G.4 - *Gopherus aggassizi* /Desert tortoise was noted as "...Actual observation on-site..." (see previous tortoise comments regarding the 1990 BLM study reports and the need for clearance from the US Department of Interior's Fish and Wildlife Service (threatened species) and the State Fish and Game for any future possible violations under the definition of the "taking" of such tortoise species). (71)

APPENDIX H: AIR QUALITY CONSTRUCTION AND VEHICLE EMISSIONS IMPACTS

The LEA's comments on this section will be deferred to the Air Pollution Control District (APCD) for additional input regarding any related airborne emissions issues prior to submitting the final observations and comments to be included within the appropriate text sections of the Final EIR/EIS, prior to certification by the SBCo BOS.

APPENDIX I: TRANSPORTATION CALCULATIONS

See comments above, under Appendix H.

APPENDIX K: CORRECTIVE ACTION INSURANCE POLICY

The LEA's comments on this section will be deferred to the SBCo Human Resources/Risk Management Division for additional input regarding adequate coverage in the event of a breach in the closure/post-closure stages of the proposal prior to submitting the final observations and comments to be included within the Final EIR/EIS.

END OF REPORT

RAILCYCL2.ADD

DOCUMENT 030
SAN BERNARDINO COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES
RESPONSE TO COMMENTS

Response 030-1

1. Discussions in the EIR/EIS are phrased to be as specific as possible, given the status of the proposed action. As project planning progresses, it is possible to be more precise. Additional precision would occur as a result of actual operating experience. For these reasons, responses such as, "as needed", "as required", or "as necessary" represent an appropriate level of specificity at this stage of planning for the proposed action.

Response 030-2

1. The Summary of this Final EIR/EIS incorporates any changes in the findings and conclusions of the EIR/EIS.

Response 030-3

1. Section 2.4 of the Supplement discusses regional solid waste disposal needs and other waste-by-rail projects including the Campo Landfill.

Response 030-4

1. The proposed action does not lie within any areas being considered for special designation under the proposed California Desert Protection Act. The closest areas to the project site being proposed for protection are the Marble Mountains Wilderness Area (four miles north) and Sheephole/Cadiz Wilderness (four miles south). The proposed Old Woman Mountains Wilderness Area is located approximately 16 miles to the west of the project. The proposed Bristol Mountains Wilderness Area is located approximately 16 miles to the north of the project. The above wilderness areas, as well as other special management areas in the CDCA in the general area of the proposed action, were shown in Figures 4.14.1, 4.14.2, and 4.14.3, and discussed in Sections 4.14.2.1 and 5.14.1.3 of the Draft EIR/EIS.

2. The proposed action would have no impact on the lands proposed for protection under the California Desert Protection Act. This determination is based on information about the proposed action's potential environmental effects detailed in the Draft EIR/EIS, which, with respect to the proposed wilderness areas, are made less significant by the distance of the proposed project site from these lands, as well as specific language in the California Desert Protection Act which states:

   > "The Congress does not intend for the designation of Wilderness Areas in...this Act to lead to the creation of protective perimeters or buffer zones around any such Wilderness Area. The fact that non-wilderness activities or uses can be seen or heard from, areas within a wilderness area shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area" (Section 105, January 1993).

3. With regard to areas not included in the California Desert Protection Act that may previously have been considered for Wilderness designation (which would include the former CDCA Ship Mountains Wilderness Study Area, covering a portion of the Cadiz Valley Alternative site), the Act states:

   > "The Congress hereby finds and directs that lands in the California Desert Conservation Area, of the BLM, not designated as Wilderness or Wilderness Study Areas by this Act, have been adequately studied for Wilderness designation pursuant to Section 603 of the Federal Land Policy and Management Act of 1976 (90 Stat. 2743 43 U.S.C. 1701 et seq.) and are no longer subject to the requirements of Section 603(c) of the Federal Land Policy and Management Act of 1976 pertaining to the management of Wilderness Study Areas in a manner that does not impair the suitability of such areas for preservation as wilderness" (Section 108).

4. Based on the above, neither the proposed action nor its alternatives would have an adverse impact on lands being considered for protection under the proposed California Desert Protection Act.

Response 030-5

1. There would not be a conflict between Rail•Cycle's use of MRFs as a source of waste for the proposed Bolo Station Landfill. Whether MRFs are owned and operated by Rail•Cycle, public agencies or other private ventures, their purpose is to assist public agencies meet their AB 939 requirements. The success of MRFs would depend on their ability to assist cities and

counties in meeting these AB 939 requirements. If a MRF operator could or would not enable its "client" cities or counties to meet their AB 939 requirements, it is assumed the cities or counties would choose to utilize another MRF.

2. As discussed in Chapter 2.0 of the Supplement, the purpose and need analysis for the proposed action assumes that waste disposed at the proposed Bolo Station Landfill has fully complied with AB 939 diversion requirements. Even with this assumption, the analysis shows that the large volume of waste that must be landfilled after the diversion requirements of AB 939 have been achieved would support operation of the proposed landfill.

3. The recyclable recovery rates noted on Table 3.2 of the Draft EIR/EIS are identified as typical for Rail•Cycle. As indicated in the Draft EIR/EIS, the rate of recyclable materials recovered at a specific MRF will be dependent on the composition of the waste stream, which is expected to vary by source and over time. While green waste may not be composted at the proposed landfill, it is still assumed that to meet the requirements of AB 939, cities and counties would implement active compositing programs. It is assumed that the remaining reduction required by AB 939 would be met through various source reduction efforts implemented both publicly and privately. While MRFs are recognized as an important part of the solid waste management system, they are not required to meet all of the reductions of AB 939. Programs such as curbside recycling and composting are expected to remove a portion of the waste stream before it reaches the MRFs. In addition, source reduction is expected to permanently eliminate waste categories from the waste stream.

Response 030-6

1. Tipping fees have been deemed by the state and federal regulations to be the appropriate source of funding to provide for closure of landfills and for the minimum of 30 years of postclosure monitoring and maintenance. In accordance with CCR Title 14, Division 7, State AB 2448 (Eastin) and Subtitle D, Rail•Cycle would establish an appropriate funding mechanism for setting aside closure and postclosure funds. The selected funding mechanism requires the approval by the LEA and CIWMB.

2. Funding mechanisms utilized for the proposed action would be subject to review and approval by the LEA, CIWMB, and RWQCB. The funding mechanisms would provide assurance that adequate funding is available for compliance with the requirements of the SWFP, WDRs, CUP, and the closure/postclosure plans for the landfill.

3. CCR Title 14, Division 7 requires that preliminary closure and postclosure monitoring and maintenance plans be submitted for a landfill as part of its application for a SWFP. Included in the preliminary plans are cost estimates for closure and postclosure. It is these cost estimates that form the basis for determining what portion of the tipping fee is to be set aside for funding of closure and postclosure. Rail•Cycle would prepare the preliminary closure and postclosure plans as part of the permitting process for the proposed landfill.

4. While not required by CEQA and not part of the EIR/EIS, the County Solid Waste Management Department is preparing a fiscal impact analysis regarding the potential fiscal impact of Rail•Cycle on the County's solid waste management system. The County's fiscal impact analysis would be considered by the County Board of Supervisors along with the information included in the EIR/EIS.

Response 030-7

1. A Draft RDSI for the proposed landfill was submitted to the LEA for review in June 1993. However, there are no statutory requirements for the RDSI to be submitted as part of the CEQA/NEPA process that results in preparation of the EIR/EIS. In fact, it would be premature to do so without first providing environmental analysis and review of the proposed action and subsequent comments from involved agencies. It is the purpose of the initial environmental evaluation presented in the Draft EIR/EIS that the proposed action be presented so as to be evaluated on the basis of both its potential merits, as well as impacts on the environment. The information to facilitate such evaluation is provided in the Draft EIR/EIS for the Bolo Station Landfill.

Response 030-8

1. Rail•Cycle has stated that the proposed landfill would only accept waste from MRFs which can demonstrate that they have an approved Hazardous Waste Screening/Exclusion Program that is acceptable to SBCDEHS, as the LEA for the proposed action. The RDSI sets forth provisions for the screening and handling of suspected hazardous waste that may enter the landfill.

Response 030-9

1. As stated in Response 030-8, each MRF serving the proposed landfill must demonstrate that it includes an acceptable hazardous waste screening program. Waste entering the landfill would be screened for compliance. The cost of assuring compliance would be factored into the tipping fee. For example, if it were determined by regular inspections that a specific MRF serving the landfill was not adequately screening hazardous wastes prior to shipment, a variety of different penalties could be imposed. These penalties could range from levying of surcharges for each event, to billing for additional inspections, or the cost of removing hazardous substances prior to disposal, or terminating access to the landfill for repeated offenses.

Response 030-10

1. The purpose of Figure 3.3 in the Draft EIR/EIS was to show the rail routes that would be used to haul solid waste that has been processed through MRFs, to the proposed landfill. These routes would not have a collective or cumulative effect on other proposed waste-by-rail landfills (i.e., Eagle Mountain and Mesquite). Figure 3.3 was intended to provide a greater level of detail than was shown in the smaller scale Figure 3.2. The information in Chapter 3.0 of the Draft EIR/EIS, where these figures were located, was intended to be descriptive. The required discussion of potential cumulative impacts was presented in Chapter 6.0 of the Draft EIR/EIS.

Response 030-11

1. Figures 3.7, 3.8, 5.9.2, and 5.9.3 of the Draft EIR/EIS represent different methods of presentation, of the same information, on the physical configuration of the completed landfill.

2. Figure 3.7 was a computer model of the final configuration of the landfill (earlier phases are shown in Figure 3.6). Figure 3.8 showed cross sections that were keyed to viewpoints labeled on Figure 3.9. Figures 5.9.2 and 5.9.3 were enhanced photographs. These various depictions and perspectives were consistent and were useful for different purposes. The computer model in plan view (Figure 3.7) and cross sections (Figure 3.8) were useful in depicting the final landfill configuration by utilizing conventional engineering standards. They purposely do not show the landfill in context with the surrounding environment. The enhanced photographs (Figures 5.9.2, 5.9.3) display the appearance of the completed landfill within the existing environment in a way that was not otherwise possible. These views provided a visual perspective of the engineering characteristics that were schematically depicted in Figures 3.6, 3.7, and 3.8.

Response 030-12

1. The size of the working face of the landfill would be determined by experience in the field during varying climatic conditions and in response to operational occurrences such as amount of waste landfilled on a daily basis, containment of litter, occurrence of ravens, and attraction of vectors such as rodents and insects. The intent is that the width of the working face would be compatible with ambient environmental factors, operating conditions and criteria, and in compliance with applicable regulations and permit conditions.

Response 030-13

1. The commenter misinterpreted the discussion in the Draft EIR/EIS regarding which regulatory agencies would be involved in permitting the use of an alternative daily cover at the proposed landfill. As stated in Section 3.3.2.1.3 of the Draft EIR/EIS, Rail•Cycle would apply a minimum 6-inch thick layer of compacted soil or an alternative daily cover, if the use of an alternative is permitted for use onsite by the SWFP. The SWFP would be issued by SBCDEHS as the LEA, with the concurrence of the CIWMB. Approval for the use of an alternative cover would also be required from the RWQCB as part of the WDRs for the landfill.

2. With respect to alternative daily cover, WMNA reports that it has successfully applied alternate daily cover at the three landfill sites that it operates in southern California:

   - Bradley Landfill, Los Angeles. Foam cover has been used since about 1983.
   - Lancaster Landfill. A one-year trial of geosynthetic cover began in November 1992. There has been no reported difficulty in meeting prescribed performance standards while utilizing this cover, including those related to ravens and potential vectors.
   - Simi Valley Landfill. A one-year demonstration of a reusable geosynthetic cover was begun in March 1993 after two months of trials.

   WMNA also uses alternate forms of daily cover materials at many of its other 130 landfills in North America.

3. As a point of clarification, based on ongoing refinement of anticipated operations at the proposed landfill, Rail•Cycle plans to request approval from the LEA, CIWMB, and RWQCB during the permitting process for use of an alternative cover on the side-slopes of the working face. Under this concept, a 6-inch layer of compacted soil would still be applied as daily cover on the top of the working face. The most likely alternative being considered by Rail•Cycle for use on the side-slopes of the working face, is a reusable geotextile blanket.

Response 030-14

1. The concern raised by this comment is noted; however, Bolo Station is in an area that experiences lower velocity winds than various other areas in which landfills are operated in conformance with the litter control conditions of their permits. For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County, California (data from January through December 1991) is provided below:

PERCENTAGE OF HOURLY OBSERVED WIND SPEEDS

WIND SPEED HIGHER THAN:	BOLO STATION	ALTAMONT
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

2. The Altamont Landfill is located in an area of relatively constant wind velocity and has attracted wind powered electrical generating facilities. According to WMNA, this landfill is operated in compliance with the conditions of its SWFP, including litter control. The Altamont Landfill is permitted to receive up to 11,500 tons of waste per day and typically receives 6,000 tons of waste on a daily basis. The majority of waste is transported to the site by transfer trailers that are tipped at the working face using a portable tipper, similar to those proposed at Bolo Station.

3. Litter control measures for the proposed Bolo Station Landfill were discussed in Section 3.3.2.1.3 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected onsite.

4. An important point to note is that by primarily accepting post-recycled waste or waste that has been processed through a MRF, as will be a condition of approval by the County, a significant portion of the primary source of litter at most landfills (i.e., paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the litter control measures that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

5. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program that shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high velocity winds. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

Response 030-15

1. Computer modeling using the COE's HELP model indicates that, as a result of a variety of factors, including the characteristics of the solid waste and the aridity of the site environment, relatively small volumes of leachate would actually reach the leachate collection system that would be installed at the landfill. Leachate that does reach the leachate collection system would be collected and disposed of according to the final design for the proposed landfill that requires the approval by the LEA and CIWMB as part of the SWFP. It is unlikely that leachate would escape the double-composite liner system, as any holes in the liners are not likely to be aligned in a manner that would permit the leachate to flow through both liners.

2. In addition, it is unlikely that either liner would even leak. Construction procedures would accommodate geotechnical conditions at the site and characteristics of the liner material to avoid piercing of the liner. Differential settlement of the landfilled waste, which could cause leaks, is not indicated based on the results of the site-specific

geotechnical investigations. Further, the liner material itself (HDPE) is structurally capable of withstanding the potential stresses that could result.

Response 030-16

1. The leachate collection system is an integrated system with a geosynthetic drainage layer and a central collection pipe in each module, as shown in Figures 3.11 and 3.12 of the Draft EIR/EIS. The hydraulic characteristics of this system were evaluated in the *Bolo Station Landfill - Alternative Liner Design Evaluation Report* (Rust, 1993a). This study, completed for the ROWD and RDSI, concluded that the leachate collection system design would handle 100 percent of the maximum flow of leachate, with a maximum hydraulic head of 0.1 inch.

2. The final landfill cover is designed to slope at a minimum grade of 7 percent, not the 2 percent indicated in the comment. Any uneven settlement that occurs on the final cover would be handled as a routine maintenance item. Completed sections would be monitored continually, and corrective measures would be performed whenever necessary, such as soil replacement or regrading to minimize ponding. It should be noted that potential adverse effects of ponding would be minimized by both natural and design factors. The proposed geomembrane element of the final cover would prevent infiltration, and the arid climate would result in the rapid evaporation of any water that is ponded.

Response 030-17

1. Figure 3.9 of the Draft EIR/EIS was based on preliminary conceptual design of the proposed landfill. As part of its final design of the landfill, Rail•Cycle conducted a hydrologic analysis for stormwater run-on and runoff. Based on this analysis, refinements in the design of the drainage features have been completed. For example, the unlined channel would not be extended in the future, rather, it would flow into the runoff sedimentation basin before being discharged to adjacent areas. Each channel would have a spillway section leading into the sedimentation basin and energy dissipators, as described in Section 3.3.2.1.4 of the Draft EIR/EIS.

2. The final hydrologic design and calculations of the stormwater run-on and runoff features at the proposed landfill were included in the Draft ROWD and Draft RDSI that have been submitted to the RWQCB and LEA, respectively. Approval for the stormwater run-on and runoff features would be accomplished as part of the WDRs and SWFP.

Response 030-18

1. The Draft EIR/EIS describes the typical composition of landfill gas. It is acknowledged that there may also be trace amounts of other gases resulting from the interaction of the minimal amounts of common household chemicals that can enter the waste stream. However, based on actual operating experience and quantification of gases that do occur, there are no known adverse effects of inorganic components in landfill gas.

Response 030-19

1. As addressed in Response 030-12, the size of the landfill working face would be determined by operating experience during varying climatic conditions. The actual width of the working face would be compatible with ambient environmental factors and operating conditions.

2. In addition, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) in which the optimum working face would be determined in conjunction with the LEA and CIWMB.

Response 030-20

1. The two full-time litter control personnel listed in Table 3.6 of the Draft EIR/EIS represent the minimum number that would be present during operating hours of the proposed landfill. Rail•Cycle would utilize as many personnel and as much litter fencing and containment equipment (trucks, bags, etc.) as necessary for the control of litter.

Response 030-21

1. A detailed litter control plan will be incorporated into the RDSI and the SWFP for the proposed action. Raven and vector control measures also would be outlined in the RDSI and SWFP.

Response 030-22

1. As addressed in Response 030-21, a detailed litter control plan would be incorporated into the RDSI. The plan would address personnel, fencing, equipment, and special procedures, such as those required during periods of high velocity winds. As noted in Response 030-14, the wind conditions at

the Bolo Station site are considered moderate compared to other locations where WMNA successfully operates landfills.

2. The purpose of a chain-link fence is to exclude humans and large animals, from the landfill area. The usefulness of a fence around the entire perimeter of the landfill facility as suggested by the comment is questionable, as a relatively small portion of the total landfill footprint would be active at any one time. The cost of a chain-link fence around the 14-mile site perimeter of the landfill would far outweigh the benefits. Also, it should be noted that a chain-link fence would in no way preclude ravens or rodents from the landfill.

3. The litter control measures proposed by Rail•Cycle are designed to contain the trash within an area that is much smaller than the entire site. The litter control program would rely on multiple lines of containment as close to the active face as feasible, in accordance with operating conditions and safety factors. It is the intent of Rail•Cycle to limit potential litter to as small an area as possible in order to minimize attraction of the site to ravens and vectors.

Response 030-23

1. A one-year raven baseline study was conducted by Rail•Cycle from December 1992 through December 1993 to determine the extent and habits of the existing raven populations within a 30-mile radius of the site. Monthly surveys during this 12-month period documented the current populations of ravens and other bird species, as well as use patterns within the study area. Baseline data will be compared to data collected during the operation of the proposed landfill. If evaluation of data indicate that ravens are being attracted to the site, or if an increase in ravens in the general area can be attributed to the landfill, then additional mitigation measures would be implemented at the landfill in consultation with LEA, BLM, USFWS, and CDFG.

Response 030-24

1. As stated in Response 030-23, Rail•Cycle shall explore additional raven control measures with appropriate regulatory agencies if the mitigation measures in the EIR/EIS prove to be ineffective.

Response 030-25

1. The proposed landfill would be operated in a manner to minimize the attractiveness of the facility to ravens and vectors. Ravens and vectors would be discouraged from feeding or being attracted to food residue/washwater at the container wash operation, as landfill personnel would perform routine container cleansing. The presence of humans is expected to deter ravens from the area of activity. Further, at no time would residues containing food scraps or other waste remain available for scavenging. The residue would be removed routinely and transported to the landfill working face for disposal. Ravens would be deterred from this and other activity areas (such as the landfill maintenance area and public drop-off facility) by the presence of personnel, plus additional conditions that may be included in the SWFP.

Response 030-26

1. Rail•Cycle will submit preliminary closure/postclosure plans as part of the SWFP application. In addition, Rail•Cycle will attempt to obtain CIWMB concurrence for the closure/postclosure funding mechanism at the earliest possible date.

Response 030-27

1. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to the communities in southern California after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve the communities in southern California.

2. As detailed in Section 3.3 of the Supplement, alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated

from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action.

Response 030-28

1. See Response 030-3. Section 2.4 of the Supplement included the Campo Landfill rail-haul project. The Campo Landfill was not considered to be a reasonable or feasible alternative to the proposed action due to its failure to meet the basic objectives of the proposed action, including its distance from Los Angeles County, its limited size and daily disposal capacity.

Response 030-29

1. Section 5.1 of the Supplement discussed the refined analysis of the potential for differential and overall settlement at the proposed site. Based on follow-on soil sampling, soils underlying the site may be more appropriately classified as "over-consolidated" rather than "normally to slightly over-consolidated" as characterized in the Draft EIR/EIS (Jacobs, 1993b). The extensive site investigation work performed by Rail•Cycle supports the conclusion that settlement would occur gradually with time and would not constitute "differential" settlement that would impose discontinuous stresses on liner materials.

Response 030-30

1. A substantial analysis has been conducted to provide the assurance that significant threats to either the quality or quantity of Cargill's brine resources would not result due to the proposed landfill. Detailed analysis related to this issue has been conducted subsequent to distribution of the Draft EIR/EIS and were summarized in Sections 5.2 and 5.3 of the Supplement.

Response 030-31

1. With the exception of Figure 4.4.11, the Draft EIR/EIS figures as referenced in this comment (Figures 4.4.8 through 4.4.12) are accurate and are still applicable. Figure 4.2.2 of the Supplement, updated the Draft EIR/EIS Figure 4.4.11 by providing an updated description (contour map) of total dissolved solids (TDS) in the ground water. The figure has been refined further and is included in Chapter 1.0 of this Final EIR/EIS.

Response 030-32

1. The landfill/raven/tortoise linkage issue was not omitted from discussion; it was addressed in Sections 5.6.1, 5.6.5 and 5.6.7 of the Draft EIR/EIS. The mechanism by which the commenter has determined that ravens, as a non-endemic species, have created and maintained the existing Category 3 desert tortoise habitat at the site through juvenile tortoise predations, is unclear. Available data suggest the opposite, i.e., the lack of available prey or other food source is the factor responsible for a limited number of ravens in the vicinity of the site.

2. The lack of a food source is suggested by results of the Wintering Bird Survey (Ecological Research Services, 1991) of the project region completed for the Draft EIR/EIS, as well as data obtained for the raven baseline study. The Wintering Bird Survey reported that ravens were sparsely distributed in the Cadiz Valley, although a large concentration was observed in and around Ludlow. Concentrations of ravens were not found at or around Amboy, Saltus, or Cadiz during the 1991 wintering bird survey. These findings are consistent with monthly reports of the raven baseline study which have found the largest numbers of ravens to be in the vicinity of Ludlow and CLC vineyards and citrus groves near Cadiz. The common factor that attracts ravens to Ludlow and CLC's agricultural operation is an available food source.

3. As noted in Section 4.6 of the Draft EIR/EIS, field studies at the Bolo Station site revealed that species diversity was significantly less than anticipated from the literature review conducted as part of the studies. As shown in Figure 4.6.3 of the Draft EIR/EIS, the proposed site is within a large area of the Mojave Desert that is considered by BLM, to provide minimal desert tortoise habitat value and is either uncategorized or designated as Category 3 tortoise habitat. Evidence of past predation as a cause of the limited tortoise population in the vicinity of Bolo Station was not reported in results of the tortoise surveys.

4. Tortoise predation by ravens has been studied extensively over the past ten years (BLM, 1989). Evidence of raven predation is indicated by the presence of shell fragments near raven perch sites. Such evidence enables investigators to determine the approximate numbers and ages of tortoises that have been utilized as a food source. Such evidence has not been reported for the Bolo Station area (BLM, 1989). The findings of previous

investigations were confirmed by recent field studies of the Bolo Station site. No evidence of past raven predation on tortoise at the site was noted during the recent field study (Karl, 1992).

5. As historic data on tortoise occurrence are not available for the Bolo Station site, it can neither be asserted nor denied that there was ever a viable population of tortoise at the proposed site. One reason for the absence of tortoises at the site could be the Santa Fe rail line, which has been active for the past 100 years. In general, in an area where there is a tortoise population, tortoise sign is known to decline significantly within about one-half mile of an active railroad (Karl, 1992) or a paved roadway (Nicholson, 1984).

Response 030-33

1. In January 1993, during extreme rainstorms, ATSF double main-tracks in the vicinity of Hesperia were temporarily taken out of service to place additional ballast (rock) for erosion prevention (Brendza, 1993). One of the two tracks was out of service for approximately two hours and the other track remained out of service for approximately five hours. At no time were the tracks "washed out" as reported by this comment.

2. ATSF maintains a supply of maintenance equipment and materials in strategic locations to enable it to respond immediately to situations such as that which occurred near Hesperia, thereby minimizing or precluding any service disruption.

3. In addition, as discussed in Section 4.12.1.2 of the Draft EIR/EIS as most rail segments that would be utilized by Rail•Cycle are double track, service can be provided on at least one of the tracks in emergency situations. In addition, significant track blockages in which both tracks are affected can normally be cleared and rail service restored within 24 hours. In the event rail blockages extend beyond 24 hours, alternative routes are available as shown in Figure 4.12.3 of the Draft EIR/EIS. ATSF has holding tracks which can hold trains in progress at Barstow, San Bernardino, and Los Angeles. Additional container equipment is also available in Los Angeles and other locations, therefore, track blockages are not expected to affect operations at MRFs.

4. ATSF also has reciprocal agreements with both the Union Pacific Railroad and the Southern Pacific Transportation Company for alternative routing and detour of trains in the event of a significant emergency. Although detour routing is seldom required, these alternative routes provide access to the Bolo Station site and could be used for such emergencies.

Response 030-34

1. See Response 030-4.

Response 030-35

1. It is agreed that AB 2296 was not clearly defined. Chapter 1.0 of this Final EIR/EIS includes a list of minor changes and corrections to the Draft EIR/EIS. However, this comment does not alter the findings or conclusions of the EIR/EIS.

Response 030-36

1. The land exchange process is adequately described for the purposes of determining environmental effects in Sections 1.1 and 5.14.1 of the Draft EIR/EIS. The Eagle Mountain and Ward Valley projects are not related to the decision by BLM to approve the proposed exchange of federal and private lands as part of the proposed action.

Response 030-37

1. The last three sentences in the last paragraph on page 4.4-15 of the Draft EIR/EIS are hereby deleted due to duplication of information appearing in the following paragraph.

Response 030-38

1. It is noted that both Joshua Tree and Morongo Valley are unincorporated communities. Landers is the correct spelling for that community.

Response 030-39

1. The number of military personnel and dependents have changed slightly since the data was collected for the Draft EIS/EIR. According to the Public Affairs Office of the Twentynine Palms Marine Corps Base, the number of military employees is currently 10,825 (up from the 10,000 reported in the Draft EIR/EIS), and the number of civilian employees is currently 1,400 (down from the 1,470 reported in the Draft EIR/EIS, Table 4.15.5). The most recent number of dependents is 9,140, which brings the total of military personnel and dependents assigned to the base to 19,965 (down from the 21,000 reported in Table 4.15.2 of the Draft EIR/EIS) (Jenkins, 1993).

2. Based on the updated figures, Note 3 in Table 4.15.2 would now read:

   > "Does not include approximately 20,000 military personnel and dependents assigned to the Twentynine Palms Marine Corps Base (Jenkins, 1993)."

   Table 4.15.5 would also indicate 11,000 military employees and 1,408 civilian employees.

3. The Marine Corps does not document military personnel who utilize the base for temporary training missions (Logue, 1993). Therefore, there are no records for "transient" personnel assigned to the base.

4. As the numbers for the Twentynine Palms Marine Corps Base reported in the Draft EIR/EIS and the current numbers provided by the Marine Corps are consistent, there is no need to revise the text and tables of the Draft EIR/EIS. Based on the consistency of the numbers, the findings and conclusions of the Draft EIR/EIS associated with the population of various categories of individuals at the Twentynine Palms Marine Corps Base are virtually the same as described in the Draft EIR/EIS.

Response 030-40

1. In the case of a HAZMAT incident associated with the proposed action, interagency coordination would be required. The County Forestry and Fire Warden Department would be the initial responder to a 911 call for a HAZMAT incident at or near the proposed site and would have the responsibility of securing the scene. SBCDEHS would be immediately notified by the County Forestry and Fire Warden Department and would be responsible for assuring that appropriate cleanup and/or remediation had been accomplished (Miller, 1993).

Response 030-41

1. Sections 4.1 and 5.1 of the Supplement provided refined information on settlement calculations and a clarified explanation of the derivation of the estimates of potential settlement (Jacobs, 1993b).

2. Responses 030-15 and 030-16 summarize the potential for differential settlement and the design components of the composite liner system, leachate collection system and monitoring system, to mitigate both differential and overall settlements. Detailed analyses of the capability of the liner and leachate collection system to withstand settlement are appropriately included in the RDSI that has been submitted to the SBCDEHS as the LEA.

Response 030-42

1. Sections 4.3 and 5.3 of the Supplement provided refined analyses regarding the potential impact of ground water withdrawal and settlement on brine capacity and recharge. Based on reports prepared for Rail•Cycle, it has been concluded that the proposed action's impacts to the chemistry and hydraulic characteristics of the underlying ground water would be negligible (Jacobs, 1993b; Rust, 1993c).

Response 030-43

1. As noted in response 030-30, Sections 4.3 and 5.3 of the Supplement provided refined information regarding this issue.

Response 030-44

1. As noted in response 030-30, Sections 4.3 and 5.3 of the Supplement provided refined information regarding this issue.

Response 030-45

1. References to follow-on studies which have been conducted, and the overall conclusions regarding the potential of brine contamination as discussed in Response 030-30. See Chapter 5.0 of the Supplement for a discussion of the results of the follow-on studies.

Response 030-46

1. See Responses 030-15 and 030-16.

Response 030-47

1. As discussed in Section 5.4 of the Draft EIR/EIS, the Bristol Basin is currently in overdraft. Simulated ground water modeling conducted by Rail•Cycle indicates that the proposed ground water pumping for onsite uses would not significantly impact ground water resources. However, as described in Section 4.2.2 of the Supplement, the level of ground water recharge in the Bristol Basin is uncertain. The proposed ground water use for the expansion of the CLC agricultural operation is substantial (up to 30,000 acre-feet per year) in a basin that has a recharge rate estimated to range from as low as

3,500 acre-feet per year to as high as 20,000 acre-feet per year (URS, 1993). Even at the high recharge rate, the proposed expansion of CLC's agricultural operation would result in a significant overdraft of the Bristol Basin.

2. Even though the proposed Bolo Station Landfill has a relatively low water use rate (i.e., approximately 130 acre-feet per year), when this is combined with the proposed 30,000 acre-feet per year that would be used by CLC and the current water withdrawn by Cargill and National Chloride, this represents a cumulative significant adverse impact. With the approval of the CLC expansion, this significant adverse impact would occur whether or not the proposed Bolo Station Landfill is operational.

3. As the proposed Bolo Station Landfill is only a minor contributor (i.e., 130 acre-feet per year) to the potential overdraft of the Bristol Basin, no additional mitigation measures beyond those included in the Draft EIR/EIS and Supplement for ground water use are required.

Response 030-48

1. For information on measures to control nuisance factors such as vectors, litter, and odor, refer to the following responses to comments:
    - Vectors - Responses 030-12, 030-21, 030-23, 030-25, 030-32, and 030-49.
    - Litter - Responses 030-12, 030-14, 030-20, 030-21, and 030-22.
    - Odors - Response 030-19.

Response 030-49

1. An April 1993 report by Edwin Barnes, Ph.D., entitled *Agricultural Impact Report - The Potential Impact on Local Agriculture from the Proposed Rail•Cycle Bolo Station Landfill* (Barnes, 1993), summarizes experiences reported by researchers at California State Polytechnic University, Pomona (Cal Poly), relative to the potential for insect/nuisance vectors to be introduced into agricultural zones. The report references the following agricultural operations conducted in proximity to sanitary landfills:
    - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile of the 2,800 ton per day County of Los Angeles Spadra Landfill.
    - Privately owned and operated orchards situated in proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

2. The following discussion highlights the findings of the above report:
    - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported health or safety impacts.
    - Negative effects, attributable to landfill operations on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
    - Unpaved internal roads within the Cal Poly campus farm are responsible for more fugitive dust-related impacts on agricultural operations than fugitive dust emitted from the Spadra Landfill.
    - Citrus trees located 3 tenths of a mile from the Highgrove Landfill do not exhibit more dust or dirt than trees one mile away and in the middle of the orchards.
    - The Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

3. The following mitigation measures are recommended in the report to minimize potential agricultural impacts:
    - Implementation of fugitive dust control measures, including watering, use of dust abatement products, construction of berms, speed limit controls, and curtailing operations during occasional high winds. This mitigation measure was already included in the Draft EIR/EIS for the proposed Bolo Station Landfill.
    - Installation of a pole and wire system or some other effective alternative for control of birds. This mitigation measure was already included in the Draft EIR/EIS for the proposed Bolo Station Landfill.
    - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be constructed by a consultant

selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

Response 030-50

1. The Draft EIR/EIS discussed the potential visual effects of both the operating landfill and the final configuration of the completed facility (see Section 5.9.1). Under the environmental issue of visual resources, Table 1.1, the Draft EIR/EIS described the presence of the landfill on the desert floor as a significant unavoidable impact, as it would permanently change the visual character of the site. The table also noted (Footnote 2) that, "For purposes of CEQA, a statement of overriding considerations is required for any significant unavoidable adverse impacts."

2. It is not clear how additional substantiation text as requested by this comment would result in mitigation of the visual impacts of the proposed action below a level of significance. Further, CEQA Guidelines include specific provisions for addressing significant unavoidable impacts. Section 15043 of the CEQA Guidelines states:

   > "A public agency may approve a project even though the project would cause a significant effect on the environment if the agency makes a fully informed and publicly disclosed decision that: (a) there is no feasible way to lessen or avoid the significant effect . . .; and (b) specifically identified expected benefits from the project outweigh the policy of reducing or avoiding significant environmental impacts of the project . . ."

   This section of the CEQA Guidelines is further clarified by the statement that " . . . CEQA provides authority to approve projects which have significant adverse environmental effects."

3. The text of the Draft EIR/EIS is adequate to describe the visual impacts of the proposed action and that no revisions are necessary. The enhanced photographs and other depictions supply sufficient information to define the level of the impact. Therefore, additional information is not required.

Response 030-51

1. The number of trains on each segment of the rail routes to the proposed landfill are based on data provided by ATSF and SCRRA. Section 5.5 of the Supplement includes a revised analysis of noise impacts based on current data regarding the specific number of trains between Barstow and the proposed site.

Response 030-52

1. The number of trains on each segment of the rail routes to the proposed landfill are based on data provided by ATSF and SCRRA. See response 030-51.

Response 030-53

1. Potential impacts to surrounding land uses were evaluated in the Draft EIR/EIS in Section 5.14 based on existing and planned land uses. It is not appropriate for the EIR/EIS to speculate as to what type of future actions, not currently allowed by existing zoning, might take place on surrounding lands. CEQA and NEPA do not require the type of speculation suggested by the commenter, but rather require that an EIR/EIS focus on the reasonably foreseeable effects of a proposed action.

Response 030-54

1. The environmental effects of the proposed action are part of the public record through the EIR/EIS and the project's findings and entitlements, as well as through monitoring and reporting programs required by local, state and federal agencies. Future developments in the vicinity of the landfill would be responsible for informing themselves as to the nature of operations at the landfill.

Response 030-55

1. According to the Joint Public Affairs Office at the Twentynine Palms Marine Corps Air Ground Combat Center, there currently are no plans to expand the mission of the base. Any previous plans are no longer operative, per recent policy and action of the Base Realignment and Closure Committee (Rodriguez, 1993).

Response 030-56

1. The discussion of regional land uses and incompatibility was addressed in Section 5.14.1.2 of the Draft EIR/EIS. Other potential land use compatibility impacts were addressed under specific environmental sections (i.e., air quality, general water, etc.) in the Draft EIR/EIS and Supplement.

Response 030-57

1. Table 6.1 of the Draft EIR/EIS noted that most of the projects listed (Nos. 1, 2, and 4 through 10) are in the process of environmental review by the County or are in some other preliminary stage of the permitting process. The status of the environmental review process of these proposed actions does not affect the conclusion as to their potential to result in cumulative effects relative to the geology of the area.

2. This evaluation of cumulative impacts to geology and soils was based on the criteria for significance as presented in Section 5.2 of the Draft EIR/EIS. The evaluation concluded that even if the individual projects were to result in significant impacts, they are of sufficient distance from one another as to preclude cumulative effects, even in the event of significant impacts associated with the projects on an individual basis.

Response 030-58

1. This comment provides information regarding potential establishment of a trust fund for other projects in the region, but does not require a specific response.

Response 030-59

1. The Household Hazardous Waste Program can be included in a Memorandum of Understanding or other agreement with SBCDEHS. It is not necessary to revise Section 6.8 of the Draft EIR/EIS to include internal arrangements and agreements.

Response 030-60

1. It is noted that the County anticipates the final topography and revegetation plan to be so successful as to mask the fact that they are underlain by a landfill. However, in reality, it would not be possible to mask the presence of the completed landfill, given the nature of the surrounding terrain and the permanent drainage structures that would remain, even after the postclosure period.

2. The presence of such a large operating facility for a period of 60 to 100 years, plus the landfill's role as a major employer in the region would keep the existence of the facility well known for at least the next 100 years. Although it is not anticipated that the existence of the landfill would not be known, the County may wish to add the facility boundaries as a permanent feature on County maps or other documents that are consulted during preliminary stages of planning new developments.

Response 030-61

1. Chapter 6.0 of this Final EIR/EIS indicates that the LEA was consulted in preparation of this EIR/EIS.

Response 030-62

1. It is the goal of Rail•Cycle that issues raised by the SBCDEHS will be adequately addressed prior to processing of the application for the SWFP.

Response 030-63

1. The list shown in Chapter 11.0 is the distribution list for the Draft EIR/EIS. The list for the distribution of this Final EIR/EIS has been revised to include the San Bernardino County, Local Enforcement Agency, Department of Environmental Health Services.

Response 030-64

1. As noted in the Draft EIR/EIS, Table 12.1 listed various technical reports that were prepared by Rail•Cycle to be used in preparation of the Draft EIR/EIS. The BLM's Raven Management Plan and associated EIS were prepared by BLM and were not used in preparation of the Draft EIR/EIS, or the Supplement. The Raven Management Plan (1990) was used during the preparation of this Final EIR/EIS and is listed in Chapter 7.0 - References and Resources.

Response 030-65

1. The information on the two MRFs in El Segundo was to provide an example of the new types of waste collection and recovery facilities that are being planned. The proposed MRF in El Segundo has been eliminated from consideration.

2. The proposed Rail•Cycle project references an MRF that is in the planning stages in the City of Commerce. As noted in Section 3.2.2 of the Draft EIR/EIS, "A Final EIR for construction and operation of the Commerce MRF . . . was certified as complete by the City of Commerce County Planning Commission on August 26, 1992 . . ." The initial phase of the operation of the Bolo Station Landfill would utilize the City of Commerce MRF.

Response 030-66

1. The comment is correct in assuming that the new County fire station that would be constructed by Rail•Cycle would have a paramedic response unit. Section 3.3.3.6 of the Draft EIR/EIS stated that the new facility would be established within or near the Bolo Station facility. Since distribution of the Draft EIR/EIS, Rail•Cycle and the County Forestry and Fire Warden Department have agreed on a location of new fire stations. As stated in Section 3.2.5 of the Supplement, the new County fire station would be constructed by Rail•Cycle at the entrance to the proposed landfill (as shown on Figure 3.1 of the Supplement). The new fire station would be staffed on a full-time basis by County fire protection personnel with paramedic training. The station would also include office space for use as needed by law enforcement personnel.

Response 030-67

1. As this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required. Chapter 1.0 of this document includes changes and/or corrections to this Final EIR/EIS.

Response 030-68

1. See Response 030-35.

Response 030-69

1. It is noted that no Section 404 Permit is required for the proposed action.

Response 030-70

1. The specific location of point of compliance monitoring wells would be determined at the time of installation in consultation with RWQCB, and may differ slightly than depicted in Figure 5.2.2 of the Supplement.

Response 030-71

1. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

INTEROFFICE MEMO

DATE March 4, 1993 PHONE 387-2857

FROM MICHAEL G. WALKER MAIL CODE 0801
AAO/Public Works Group

TO RANDY SCOTT, Environmental Team
Planning Department

SUBJECT RAIL CYCLE PROJECT

Attached is a letter from Mike Bair, Deputy Director of SANBAG, with comments and concerns regarding the proposed Rail Cycle Project and how it will affect the Metrolink commuter rail service. Please include this in the comments on the Rail Cycle EIR.

Mike Bair has requested that SANBAG be invited to the DRC meetings so that appropriate conditions can be recommended to mitigate any impacts to Metrolink.

Please also notify me of those meetings as I would like to attend.

Thank you, Randy.

MGW:sg

cc: Supervisor Mikels
Supervisor Walker
Harry Mays
John Burke
Bob Jocks

METROLINK

Los Angeles County Transportation Commission
Orange County Transportation Authority
Riverside County Transportation Commission
San Bernardino Associated Governments
Ventura County Transportation Commission
Ex-Officio Members:
Southern California Association of Governments
San Diego Association of Governments
State of California

RECEIVED
FEB 16 1993

February 9, 1993

File: G0000234

Mr. Mike Bair
Deputy Executive Director
San Bernardino Associated Governments
472 North Arrowhead Avenue
San Bernardino, CA 92401-0045

Dear Mr. Bair:

Reference Mr. Michael G. Walker's letter to you dated January 12, 1993, requesting the research of the possible impacts on Metrolink from the Atchison, Topeka and Santa Fe Railway Company Rail Cycle project to haul, by rail, solid waste from various Southern California locations to a landfill near Amboy.

Please find listed our comments and concerns pertaining to AT&SF's proposed Rail Cycle project.

Possible benefits to Metrolink from AT&SF Rail Cycle:

- Additional Rail Cycle trains would increase AT&SF's shared use of tracks, which would increase the amount AT&SF would pay Metrolink for shared use maintenance costs according to executed agreements between AT&SF and Metrolink. ①

- Rail Cycle intermodel unit waste trains are not on a time sensitive schedule. This should allow Metrolink commuter trains with time sensitive schedules to take higher priority movement over Rail Cycle trains.

- Rail Cycle intermodel unit waste trains present schedule is to travel between 7:00 p.m. and 11:00 p.m. All Rail Cycle schedules should utilize track time that will not delay Metrolink trains or interfere with Metrolink train time schedules. The 7:00 p.m. schedule may impact the later established Metrolink service. ②

Possible negative aspects to Metrolink from AT&SF Rail Cycle:

- Rail Cycle trains and/or train schedules have the possibility of delaying or interfering with Metrolink's train schedule.

031

Mr. Mike Bair
February 9, 1993
Page 2

- The additional Rail Cycle intermodel unit waste trains will contribute to wear of rails and track structures, thus, shortened life. ③
- Rail Cycle trains will generate more local resident and general public unwanted whistle sounds in advance of and at public railroad grade crossings. ④
- Additional Rail Cycle trains would cause more automobile traffic delay at existing railroad grade crossings. ⑤
- Additional Rail Cycle trains would cause more capital expenditures and maintenance cost concerning main tracks, possible siding extensions, signals and grade crossing automatic warning devices. The agreements require AT&SF to pay for required capital improvements, but would be open for negotiations as being further shared-use facilities. ⑥
- Additional Rail Cycle trains will cause a delay of night time track and other type construction and maintenance. This delay will increase the cost of said construction and maintenance work. This is common in the industry, but will need to be factored into the operations. ⑦

In summarizing, there needs to be a continued communication and coordination between the Counties, Metrolink, and AT&SF Rail Cycle. This will go a long way in ensuring that all Metrolink and Rail Cycle trains are not delayed and additional costs kept to a minimum.

Sincerely,

JOHN L. RINARD, P.E.
Director, Engineering & Constructions

JLR:RS:dh [b:railcycl.ltr]

cc: R. Stanger
D. Solow
B. Currier
Chron/RMC/Central

DOCUMENT 031
SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY
RESPONSE TO COMMENTS

Response 031-1

1. This comment correctly notes that ATSF recently sold to the SCRRA the rail line known as the Pasadena Subdivision. In accordance with the negotiated shared use agreement between SCRRA and ATSF, ATSF agreed to limit freight traffic on the Pasadena Subdivision. In addition, ATSF agreed to pay SCRRA for shared use maintenance costs.

Response 031-2

1. This comment correctly notes that Rail•Cycle trains would not be on a time-sensitive schedule, and that Metrolink commuter trains should take priority over Rail•Cycle movements. Under the terms of the shared use agreement between ATSF and the SCRRA, both parties have agreed to work together to assure the growth and efficient operation of both freight and passenger rail service. Rail dispatching rules assure that passenger trains would be appropriately accommodated on a noninterference basis regardless of the travel times of freight trains.

Response 031-3

1. The shared use agreement between ATSF and SCRRA takes into account the wear to rails and track structure from freight rail service, and obligates ATSF to pay any capital expenditures required by freight traffic growth. This includes the growth of freight traffic due to Rail•Cycle.

Response 031-4

1. Sections 4.5 and 5.5 of the Supplement provided a revised/clarified discussion of noise impacts along the rail lines that would be used to transport waste from potential MRFs (located in southern California) to the proposed landfill. The analyses in the Supplement indicated that noise impacts associated with Rail•Cycle trains along existing rail lines are not significant.

Response 031-5

1. Revised analysis regarding vehicle waiting times at rail crossings was included in Sections 4.4 and 5.4 of the Supplement. As discussed in the Supplement, this analysis determined that impacts from Rail•Cycle trains and the cumulative impacts form the users of the rail lines (i.e., ATSF, Metrolink, and Amtrak) on vehicle waiting time at rail crossings would not be significant.

Response 031-6

1. The shared use agreement between ATSF and SCRRA takes into account capital expenditures for improvement to the rail line from freight rail service, and obligates ATSF to pay any capital expenditures required by freight traffic growth.

Response 031-7

1. The shared use agreement between ATSF and SCRRA takes into account the expense and issues of nighttime rail track maintenance.

032

CITY OFFICES:
6136 ADOBE ROAD
P.O. BOX 995
TWENTYNINE PALMS, CA 92277
(619) 367-6799
(619) 367-4890 (FAX)

COUNCILMEMBERS
Lester W. Krushat, Mayor
Elizabeth H. "Liz" Meyer, Mayor Pro Tem
Jim Bagley
Charles W. "Chuck" Bell
Christopher J. Dobler

CITY MANAGER
Jim Hart

RECEIVED
MAR 19 1993

March 19, 1993

Ms. Aileen Deardorff
San Bernardino County
Planning Department
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0182

Dear Aileen:

Due to scheduling conflicts, representatives from the City of Twentynine Palms will not be able to attend the Environmental Review Committee Hearing on the proposed Rail Cycle-Bolo Station Landfill Project (Project), on March 19, 1993.

Please accept the following as comments to be included in the record from the City:

The Environmental Impact Report (EIR) specifically identifies both positive and negative impacts to the City of Twentynine Palms from the Project. A review of the EIR develops the following comments:

1. The EIR indicates that Twentynine Palms has a low vacancy rate in housing due to the military needs. This is no longer correct due to the construction and opening of a military housing project within the City limits. ①

2. The Morongo Basin is identified as the predominate locations for the temporary and permanent workers to reside. As such, these individuals will increase the local road demands. There has been no provision in the EIR for financial mitigation of the increased roadway usage nor an indication of how the current roadway will be upgraded to handle the increased traffic flow. The City would like this addressed as part of the Project. ②

3. The EIR indicates that "...even with the implementation of the remaining mitigation measures, the proposed action is expected to have impacts on air quality that are considered significant" (page 5.7-21, Section 5.7.6, #2). Also in the document it is indicated that the air quality will not comply with the County's Air Quality Management Plan. ③

Since the City of Twentynine Palms will be sharing the same air basin with the Project, any air quality credits used by the Project have negative impacts on the City's ability to develop in the future. The City should not be negatively impacted by the approval of a project that we cannot control. The City should be allowed additional credits for the future. ③ CONT.

Since the South Coast Air Quality Management District will receive a reduction in air pollution due to reduced refuse truck trips, the City of Twentynine Palms should be given those credits toward future growth. ④

4. With the increase in populations, the EIR identifies added police protection as a need. Again, the EIR does not indicate a mitigating financial measure to assist the Morongo Basin in adding these officers. The EIR should pledge resources to assist the local communities in handling the problem. ⑤

The EIR as presented did a good job of identifying the potential impacts and in many cases has identified mitigation that will alleviate the impacts; however, in the more significant impacts the report simply does not provide offsets for the impacts.

The communities most directly impacted should be given further review and consideration for mitigation efforts. To simply indicate there is no mitigation is not acceptable to the City of Twentynine Palms. ⑥

Thank you for the opportunity to address our concerns to you.

If you have any questions, please contact Jim Hart, City Manager.

Sincerely,

Lester W. Krushat

Lester W. Krushat
Mayor

cc: City Council

JH:alb:RCBSTLP.ltr

DOCUMENT 032
CITY OF TWENTYNINE PALMS
RESPONSE TO COMMENTS

Response 032-1

1. The change in the status of vacant housing in Twentynine Palms is acknowledged. Both vacancy rates and housing values have been affected since the new 600-unit military housing project became available in early 1993. There is now a surplus, with more than 600 homes and apartments available (Fabian, 1993).

Response 032-2

1. Roadways would be affected by employee and non-employee traffic, based on the number of new employees that could move into the area in response to the proposed action. As discussed in Section 5.15 of the Draft EIR/EIS, it is estimated that the number of employees that may commute to the site from the Morongo Basin would be about 130 for project construction and about 100 for operations. At an estimated 1.2 employees per vehicle, this would result in additional employee traffic of approximately 110 vehicles for project construction and 85 vehicles for operations.

2. It is expected that Amboy Road would be most affected, with project-related personnel and other vehicles being added to the existing levels of about 630 vehicles/day. Amboy Road has a capacity of about 12,000 vehicles per day. With an average daily traffic volume of 630 vehicles, Amboy Road is currently operating at a LOS of A. The increase in traffic volume to 740 vehicles per day due to the proposed action would not result in a reduction of the LOS on Amboy Road and so would not have a significant effect. No requirement to upgrade the roadway is expected due to the proposed action. Maintenance of Amboy Road is a County responsibility, and assuming that most of the traffic between the Morongo Basin and the proposed site consists of personal vehicles, there would not be additional maintenance requirements.

3. Roads in the City of Twentynine Palms would receive additional personal vehicle traffic due to the projected population increase associated with the proposed action. Maintenance requirements would continue to be provided through gasoline taxes, which would increase with additional population that may move into the area.

Response 032-3

1. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, is not consistent with those parts of the MDAQMD's Air Quality Attainment Plan related to emission reductions of ozone precursors.

2. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review under MDAQMD Regulation XIII would be required. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response 032-4

1. It is agreed in principle that emission reductions in SCAB should result in a proportional improvement in air quality in SEDAB. Documentation currently available from CARB and MDAQMD indicate that air quality in SEDAB is related to both local sources, and during certain meteorological events, to the transport of pollutants from either the San Joaquin Valley Air Basin or SCAB. The transport of contaminants between these air basins is currently, only partially understood. CARB, SCAQMD, and MDAQMD are presently studying this issue. Therefore, for the purposes of this EIR/EIS, the relationship between emission reductions in SCAB versus air quality in SEDAB is not quantifiable based on available data.

Response 032-5

1. As shown in Table 5.15.2 of the Draft EIR/EIS, preliminary calculations result in a predicted project-related population increase of 416 persons in the Morongo Basin. This is an increase of about 0.5 percent over the existing population of approximately 75,000. Police services in the Morongo Basin are provided by the County Sheriff's Department. Although no formal agreement has been drawn at the time this Final EIR/EIS was prepared, the County and Rail•Cycle will negotiate a per-ton mitigation fee to offset potential costs to the County from the proposed

action. It is not yet known how these fees would be used but if the County Sheriff's Department determines that additional personnel are required due to the population increase associated with the proposed action, funding for the additional personnel would be an appropriate use of a portion of the mitigation fee negotiated by the County with Rail•Cycle.

Response 032-6

1. It is not understood which specific impact the comment is referring. Impacts found to be significant were mitigated or identified as an unavoidable adverse impact.

033

INTEROFFICE MEMO

DATE March 29, 1993 PHONE 2515

FROM KEN GUIDRY, Chief MAIL CODE
Water Resources Division, Trans/Flood Control Dept.

TO RANDY SCOTT, Senior Planner, Environmental Team
Planning Department

File: 603.0105

SUBJECT ZONE 6 - RAIL-CYCLE/DRAFT EIR FOR BOLO STATION LANDFILL

Reference is made to your Interoffice Memo dated December 4, 1992, with accompanying Draft Environmental Impact Report (DEIR) and Environmental Impact Statement (EIS) for the Bolo Station Landfill proposed by the Rail-Cycle Corporation, requesting comments from this office.

Bolo Station Site:

This site is located adjacent to Bristol Lake, approximately three miles southeast of Amboy community.

It appears that the Southeast portion of the site is subject to sheet overflow runoff from Chambless Wash. Chambless Wash intercepts the flow from the Orange Blossom Wash which carries runoff from the valley between Bristol and Marble Mountains. The rest of the site is subject to sheet flows from the north. The potential flood plain associated with a 100-year storm event has not been mapped or established for Bristol Lake. Without a detailed hydrology study it is hard to determine if the South portion of the site will be within the 100-year Flood Plain area. The site is, also, traversed by several drainage courses from I-40 and the AT & SF rail line. The flows from these drainage courses generally alternate between braided channels and overland sheet flow. ①

Cadiz Valley Alternative Site:

This site is a five-square mile area located approximately ten miles Southeast of the Bolo Station site, at the Southern toe of the Ship Mountains. It appears that the Southwest portion of the site is subject to sheet overflow runoff from the Eastern branch of Schulyler Wash. Also, a Southeast branch of the Schulyler Wash cuts across the Southwest corner of Section 17 and flows South towards the Cadiz Dunes. The site is, also, traversed by several deeply incised streambeds especially at Sections 5 and 9. Those streambeds are carrying runoff from the steep slopes of the Ship Mountains. ②

It is; therefore, in our opinion, that these portions of this site lying in and abutting the existing natural drainage courses are subject to infrequent flood hazards by reason of overflow, erosion, and debris deposition unless adequate provisions are provided to intercept and conduct these flows through and away from the site.

Detrimental effects could result from a haphazard cut and fill dump site operation in such a location. Uncoordinated earth work could cause changes of the existing drainage courses and produce diversion of flows onto adjacent property owners. Stock piling of refuse and materials in a dump site in such a location could produces increased debris onto downstream properties in the event of a major flood and also damages from floatable objects which are at present almost non-existent. ③

Therefore, we recommend that adequate provisions be made for conducting the drainage flows around and/or through the dump site to preclude drainage flows entering the site, eroding the land fill, and infiltrating and contaminating the groundwater. ④

Since the proposed project is a public agency project, and due to its nature (dump site), we would expect that regulations, relative to health standards, water quality standards, and various other pollution related standards, will be strictly regulated and adhered to. ⑤

Should you have any further questions or need additional information, please feel free to contact Hany Peters of this office, or me at (909) 387-2515.

KDG:DMN:jm/6019

cc: Richard Thompson, Land Development, Victorville Office

DOCUMENT 033
SAN BERNARDINO COUNTY INTEROFFICE MEMORANDUM WATER RESOURCES DIVISION, TRANSPORTATION AND FLOOD CONTROL DEPARTMENT
RESPONSE TO COMMENTS

Response 033-1

1. Subsequent to distribution of the Draft EIR/EIS, the proposed landfill design has been reconfigured. As stated in Chapter 3.0 of the Supplement, the southernmost corner of the site is no longer planned for landfilling. As required by CCR Title 23 and Subtitle D, the proposed landfill would be protected from the 100-year flood. Stormwater run-on and runoff central structures are designed to accommodate a 100-year, 24-hour storm event.

Response 033-2

1. Hydrological impacts due to the implementation of the proposed action at the Cadiz Valley Alternative site were only evaluated in general terms in the Draft EIR/EIS. A detailed drainage plan which addressed the potential flood hazards of the abutting natural drainage courses would be required for implementation of the proposed action at this alternative site.

Response 033-3

1. Section 3.3.2.1.4 of the Draft EIR/EIS described the controls which would be implemented to control stormwater runoff within the landfill limits for active working areas, completed cells, and areas to be developed. Stormwater run-on would be diverted from the active cells by temporary diversion ditches that would be constructed around the perimeter of each individual cell or working area. The water would be diverted from the active cell and collected in a temporary run-on retention pond. Stormwater runoff from within the active working area would also be collected and diverted to an unlined temporary runoff retention pond.

Response 033-4

1. See Responses 033-1 and 033-3.

Response 033-5

1. Provisions for enforcing the flood control requirements would be incorporated into permits for the proposed landfill issued by the RWQCB and SBCDEHS.

SECTION 2.4

BUSINESSES/ORGANIZATIONS COMMENTS AND RESPONSES

RECEIVED
BY

EAGLE MOUNTAIN
LANDFILL and RECYCLING CENTER

March 1, 1993

Mr. Randy Scott
Senior Planner
Environmental Team
San Bernardino County
County of San Bernardino Planning Dept.
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182

Mr. Doug Romoli
Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, CA 92507-014

Re: Draft Environmental Impact Report/
Environmental Impact Statement (EIR/EIS)
Rail-Cycle - Bolo Station Landfill
State Clearinghouse No. 91092020

Dear Mr. Scott and Mr. Romoli:

The purpose of this letter is to provide your respective agencies with comments on the draft EIR/EIS which has been circulated for public comment. MRC received local approval and certification for the Eagle Mountain Landfill and Recycling Center EIR from the Riverside County Board of Supervisors on November 3, 1992. The comments within this letter are presented not as opposition to the Rail-Cycle Project, but in hopes that both Projects are being developed on a "level playing field" for the benefit of the citizens of Southern California. For ease of reference in reviewing these comments on the draft EIR/EIS, we have arranged the comments by topics with page and paragraph references where possible to facilitate review.

INTRODUCTION (CHAPTER 2.0)

Page 2-1: There are five options for landfill capacity listed, however there is lack of discussion in the EIR/EIS about the effects these options would have on the generation of the wastestream. The volume of the wastestream and when that volume would require additional new landfill capacity is crucial to the purpose and need for the project. The EIR/EIS merely lists these options, without evaluation and/or analysis which could disclose ① other and possibly less environmentally damaging strategies to answer the need for this particular landfill project. ① CONT.

MINE RECLAMATION
CORPORATION

☐ SAN GABRIEL VALLEY
100 N. Barranca, Suite 498, 7th Floor
West Covina, CA 91791-1600
(818) 858-2008
FAX (818) 858-0786

☐ COACHELLA VALLEY
CORPORATE OFFICE
960 Tahquitz Canyon Way, Suite 204
Palm Springs, CA 92262
(619) 778-5131
FAX (619) 778-5144
(800) 253-0597

☐ EAGLE MOUNTAIN
P.O. Box 8
Desert Center, CA 92239
(619) 392-4308
FAX (619) 392-8101

INADEQUACY OF THE PROJECT DESCRIPTION (CHAPTER 3.0)

There are several items of inadequacy concerning the project description, including the discussion of project alternatives, which are set forth below in separate subparagraphs.

Page 3-35: The EIR/EIS contains an inadequate discussion of potential environmental impacts associated with the reintroduction of leachate into the landfill waste management unit itself. In addition, there is no discussion of the potential impacts of constructing and operating leachate management ponds. The EIR/EIS states that if the ponds are required, a further CEQA and NEPA review will be undertaken. This appears to be an example of project chopping whereby actual and reasonably foreseeable elements of the project are severed and culled out so that no analysis is presently undertaken. The proposed use of leachate management ponds should be fully evaluated in this EIR/EIS. ②

Page 3-52: With respect to the Landfill Gas (LFG) Recovery Facility, the description of the LFG Recovery Facility is vague, uncertain and lacks any operation or construction details in order the evaluate this aspect of the project. In addition, there is no description of the flare process for LFG combustion, and nor any information concerning air emissions from the flare process. ③

Discussion on Project Alternatives.

Page 3-63, Section 3.7: This section contains a discussion of the evaluation and selection of alternatives, including alternatives considered for further evaluation, the environmentally preferred alternative, and the alternative preferred by BLM. In NEPA terms, this is the "agency's preferred alternative." In CEQ's "40 Questions," it is defined as "the alternative which the agency believes would fulfill its statutory mission and responsibilities." This differs from the "environmentally preferred alternative," which "is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101." The agency's preferred alternative, if one is identified, must be identified in the draft EIS. The environmentally preferred alternative must be ④ identified in the agency's ROD, but the lead agency "is encouraged to identify the environmentally preferred alternative in the EIS." This is so that "the public and other agencies reviewing a Draft EIS can assist the lead agency to develop and determine environmentally preferable alternatives." CEQA, on the other hand, requires the identification of an environmentally preferred alternative in an EIR, and if the no project alternative is environmentally preferred, the identification of an environmentally superior alternative among the other alternatives. For CEQA, the "discussion of alternatives shall focus on alternatives capable of eliminating any significant adverse environmental impacts or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (Guidelines Section 15126). ④ CONT.

This EIS/EIR identifies the "no project alternative" as environmentally superior, and the Bolo Station proposal as environmentally superior among other alternatives. However, the document is deficient in that it does not sufficiently discuss the criteria for this selection in order to adequately inform the public and decision makers as to how the alternative site review process was undertaken. The EIR/EIS inappropriately limits the scope of the analysis of alternatives to the project, including alternative sites, based on a list of factors or criteria, two of which are specific siting criteria developed by the project proponent. These are listed as (1) siting and design requirements and (2) a May, 1991 report (Jacobs 1991a) "Preliminary Analysis". The list of factors utilized includes a requirement that land within a project site boundary be owned by ATSF, and that there be "additional land available" for acquisition. In addition, the alternatives were required to be located on an ATSF rail line. The discussion in paragraph 3.7.3 of the document which provides siting criteria seemed to be based only on what is desirable for the applicant based on its concept. There is no reference in the alternatives discussion to the criteria for the County or BLM to fulfill its statutory mission and responsibilities. ⑤

The document must discuss the criteria for this selection in order to adequately inform the public and the decision maker. In paragraph 3.7.3, this section gives siting criteria, some of which affect feasibility (for instance, distance and turnaround time), but some which seem to be based only on what is desirable for the applicant and all identified as "criteria identified by Rail-Cycle . . . based on its concept." There is no reference at

all to criteria for BLM to fulfill its statutory mission and responsibilities. Those criteria would be related to BLM's mission in regard to this project and are nowhere stated in this document as criteria for evaluating alternatives. Paragraph 3.7.4 lists some factors used for environmental screening, but these seem to have been applied in a process secondary to screening by the criteria in paragraph 3.7.3. ⑤ CONT.

The selection of criteria explicitly based on Rail-Cycle's objectives contrasts with the EIS/EIR's stated objectives for the project set forth in the Introduction (paragraph 2.1.1). There is no stated set of criteria to accomplish the objectives of either lead agency, and no discussion of the relationship of the applicant's objectives to either the lead agency's objectives or the principle of maximum environmental protection. This seriously prejudices the evaluation of alternatives and especially the one alternative site selected to be considered in detail. That site, called Cadiz Valley, appears to have been selected precisely because of its environmental difficulty, not because of its potential to avoid or reduce adverse effects associated with the proposed Bolo Station site. ⑥

Page 3-64, Section 3.7.1.1, Cadiz Valley. The description here concentrates on general physical factors. Notably absent is any discussion of the biological difficulties of the site that are apparent from reading Table 1-1. However, paragraph 3 states that one of the proposed exchange parcels was eliminated from this alternative because of its proximity to this site. The limited discussion of biology raises a question regarding the selection of this single alternate site to be considered in detail in the EIR. Some indication of environmental sensitivity on this site can be derived from the EIR on the County General Plan, which identifies the site as potentially sensitive for biological and paleontological reasons (see p. 4.14-2, par 5). Even more persuasive is the inclusion of part of the site in an area that BLM must manage "so as not to impair the suitability of such areas for preservation as wilderness" until Congress acts on wilderness designation (p. 4.14-13, Fig. 4.14.3). ⑦

Page 3-67, Section 3.7.1.2: The reduced action alternative is proposed only for the Bolo Station site. Yet a number of alternate sites are rejected or rejected in part because they would not support a landfill of the size proposed at Bolo Station. To be objective, the analysis needs to include both an evaluation of the ability of the reduced action to fulfill ⑧ project objectives, and an evaluation of other sites' possible use for a smaller landfill, not just the maximum size proposed. ⑧ CONT.

Page 3-68, par 3: To fulfill the stated project objectives, an alternate site need only be located sufficiently near a rail line for economical access, not specifically on an ATSF line. The meaning of "sufficient available acreage" in this paragraph is unclear: does it mean enough acreage for the landfill, or availability for this particular applicant's use? The difference is crucial to an informed decision on feasibility. ⑨

Page 3-68, par 5: The criteria of ownership and ATSF access are here used to eliminate Eagle Mountain and Niland from further evaluation. This elimination is based solely on the applicant's criteria. The Eagle Mountain project has local land use approval and has had a final EIS/EIR prepared and certified by Riverside County, lead agency pursuant to CEQA. The other is under consideration for a rail-haul landfill. There is therefore strong (in the case of Eagle Mountain) or some (in the case of Niland) evidence that both sites are suitable and feasible for developing a rail-haul landfill. This alone, in the context of the stated project objectives, should require more evaluation than is indicated here. ⑩

Table 3.8, Eagle Mountain: Rail-Cycle claims to have eliminated this site on the basis of information contained in the EIS/EIR for the Eagle Mountain project, which was circulated for public review from July to September of 1991 and was made final in July of 1992. The Eagle Mountain project EIS/EIR identified significant, unmitigated adverse impacts only on air quality and water consumption (ground water supply). This EIS/EIR identifies impacts from the Bolo Station project to be significant and unavoidable even after mitigation on ground water supply, air quality, visual resources, land use, and socioeconomics. (The failure to additionally identify unavoidable adverse impacts on biological resources is a very serious omission.) Regardless of any other factor, this comparison of documents that share a common federal lead agency indicates that, considered as an option or alternative to Bolo Station, Eagle Mountain is environmentally superior. This approach to objective evaluation in the Bolo Station document is especially serious in light of the utter failure of this EIS/EIR to present any meaningful analysis of the balance of waste generation volumes with future disposal capacity in its statement of purpose and need. ⑪

Table 3.8, Niland, Tehachapi, Eagle Mountain, Morongo Indian Reservation: All of these are eliminated because "Southern Pacific rejected consideration of investment in a major sanitary landfill." However, the Eagle Mountain project is using Southern Pacific lines and has no investment from Southern Pacific, and clearly its feasibility as a site is demonstrably not affected thereby. Southern Pacific's decision not to invest would not seem to mean its lines are not available. This criterion is clearly irrelevant, except to Rail-Cycle. But for Niland, this is only reason given for rejection. For the Morongo Indian Reservation, the time frame may be wrong for Rail-Cycle, but the stated project objectives, in the eyes of the lead agencies, would not be compromised if a longer time frame still provided sufficient landfill capacity to meet the need. ⑫

Page 3-73, Hector and Ward Valley: One of the evaluation criteria is stated as "direct access to a main rail line." Here the need to construct a spur line 5 to 15 miles long is not prohibitive. Therefore, the criterion should be modified. Was this considered for other sites where the direct access criterion was applied? This discussion is not clear on why a Class I landfill five miles north of Hector would eliminate the Hector site. ⑬

Page 3-73 Tehachapi: The need to use a Southern Pacific line does not indicate infeasibility. Eagle Mountain will use a Southern Pacific line although Southern Pacific does not have an interest in Eagle Mountain. Is WMNA or ATSF categorically stating that Southern Pacific lines would be unavailable to them under any circumstances? Or that access from Southern Pacific compromises the objectives stated in Section 2.1? Why does Figure 3.2 show use of a Southern Pacific line for the proposed Rail-Cycle system south of Mojave? ⑭

Page 3-73, par 6: Two sites are eliminated because of consideration by other private ventures. This is not a convincing criterion, given that part of the agencies' action is a basic land use decision that should be independent of the desires of one particular applicant. It does not follow that their evaluation would not be valuable for the lead agencies, the selection of an environmentally superior alternative, or their feasibility in light of the project objectives stated in Section 2.1. ⑮

Page 3-77, Locale I: Non-ownership by ATSF should not be a determining factor for the land use decision being made by the lead agencies. Even if it has some informational value for this project, the nonownership argument must be bolstered by a showing that it would be infeasible for ATSF to purchase, lease, or otherwise acquire the site, especially if it has environmental advantages, which are not even discussed here. This applies to Locales H, G, and F below also. The need to upgrade a road has not been demonstrated to be sufficient for elimination. The Eagle Mountain project includes upgrading of Eagle Mountain Road. ⑯

Page 3-78, par 1: This paragraph says Rail-Cycle picked four sites and then evaluated them for feasibility. This seems to be a reversal of a common-sense approach. It makes more sense, and is more objective, to start with the area, apply the constraints, then pick the sites. ⑰

Page 3-79, Bolo Station: The site is designated as Category 3 desert tortoise habitat. It is in the tortoise's historic range, so that occupied or not, it is potential habitat. But Oro Grande was eliminated for consideration because it was potential habitat (p. 3-73). Table 3-8 says "probable" habitat (seemingly equivalent to potential habitat in the case of Oro Grande) helped eliminate Eagle Mountain, Dunn, and Oro Grande. These criteria should be applied evenly and objectively. ⑱

There is no substantial evidence or legal rationale evident for the reduced selection of project alternatives to be analyzed. Specific environmental effects of each alternative selected for further evaluation can be discussed in the "environmental consequences" section of the document. That is a separate question, however, from whether the document demonstrates a rigorous exploration and objective evaluation of a reasonable range of alternatives, which should be done in this section. ⑲

AFFECTED ENVIRONMENT (Chapter 4.0)

The scope of the analyses of noise impacts and safety hazards from project-induced train traffic is limited to trackage within San Bernardino County, yet it appears obvious that additional train traffic outside the County boundaries (in more populated and developed areas) would result from the project. No rationale or justification for limiting the area of potential environmental impact is provided. These analyses are therefore incomplete. ⑳

The evaluation of the significance of noise impacts from increased train traffic is inadequate, based upon significance thresholds stated in the document. The Noise impacts section correctly identifies noise from train traffic exceeding 65 dbA Ldn upon residential and other areas with sensitive receptors as a significant impact. There are numerous track segments where this could be the case, and where the project would increase the area of the 65 dbA Ldn noise environment. There is no evaluation of land uses within the areas adjacent to the trackage, and no basis to evaluate whether the additional areas exposed to noise levels in excess of 65 dbA Ldn include new sensitive receptors. ㉑

POTENTIAL ENVIRONMENTAL IMPACTS (Chapter 5.0)

VISUAL RESOURCES (Section 5.9)

Page 3-7 mentions desert transfer stations without committing to doing anything. Clearly, desert transfer stations and the hauling associated with them have the potential to create environmental effects of their own. The reader of the EIS/EIR needs to know whether they are being proposed and if they are, what their environmental effects will be. ㉒

TRANSPORTATION (Section 5.12)

Page 5-12-8, Section 5.12.5: This section discusses the effects of Rail-Cycle only. If more than one large desert landfill is built, it is likely a number of trains servicing each could use the same lines, at least in the western urban service area. This analysis does not even mention such a possibility, much less analyze it. But it is quantifiable and should be discussed both here and in the cumulative impacts section. ㉓

NOISE (Section 5-13)

Page 5.13-1 ff, Section 5.13.1: Only noise effects in San Bernardino County are evaluated. Figure 3.2 shows the project using rail lines in Riverside, Los Angeles, Kern, and Orange counties. The project will contribute to rail noise in those counties. Neither CEQA nor NEPA justifies confining the analysis of impacts only to the jurisdiction of the lead agency. If the project were one mile inside the San Bernardino County line by rail, would only that one mile need to be analyzed? Should all energy consumed by the project that originates from outside San Bernardino County be ignored? ㉔

Page 5.13-4, par 3: The reasoning is advanced is not appropriate for the situation presented. For maximum operations, the increase in noise would be 4.3 dbA, not 2.6 dbA, and the effect is not reduced because it occurs in increments. The whole of the 4.3 dbA increase is attributable to the project. The reasoning employed in this paragraph is equivalent to saying that for a housing project, the residences would be built in phases so that traffic noise would not increase more than 3 dbA for any phase. Therefore, the project would not have significant impacts even though cumulative increases would result in an 80 dbA level at sensitive receptors. ㉕

In summary, this section greatly understates noise impacts. It does not use applicable local standards, and does not attempt to identify sensitive receptors within the threshold contour for significant impacts. There is no land use analysis to indicate where sensitive receptors might be located. Neither here nor in the cumulative impacts section does this document consider the effects of trains serving large desert landfills. A significance threshold is set at increases above 65 dbA in a residential area (the threshold may be lower in some affected jurisdictions). The analysis seems to suggest that since 3 dbA is a perceptible difference, the "real" threshold is 68 dbA. The pertinent question is: how many sensitive receptors will be affected by noise over the applicable standard by this project at maximum operations? The analysis does not present the data to derive the answer, either in this section or in Appendix J. ㉖

CUMULATIVE IMPACTS (Section 6.0)

Page 6-1, 6-5, par 3: This list contains Eagle Mountain but omits Mesquite Landfill. No EIS/EIR has been circulated for Mesquite, but an initial study has been prepared that could supply some detailed environmental information with more probably available through BLM or Imperial County. A potential landfill at Niland probably deserves mention also, since it is discussed on page 2-2. Regardless of distance, these are potential large, rail-haul landfills in the desert, apparently all involving use of land that is now publicly owned, and intended to serve the same long-distance urban area. In those respects they are similar projects. ㉗

Page 6-8, par 6.14.1: This statement would appear to be untrue. The proposed project has, according to the EIS/EIR Cover Sheet, land use impacts that "would remain significant and unavoidable even after mitigation." How, considered with other ㉘

projects that may add to land use impacts, even if the impacts are not considered significant for the other projects, could cumulative impacts be considered not significant? ㉘ CONT.

BIOLOGY COMMENTS

The information on biological resources and impact analyses provided for the preferred and alternative sites in the draft EIS/EIR for Rail-Cycle is minimal. Without reviewing the biological technical reports (Table 12.1), it is difficult to assess the thoroughness of the surveys and the rationales used for assessing impacts and selecting mitigation measures. ㉙

Failure to provide these technical reports in the draft document as appendices hampers a meaningful review of the document. These technical reports should be made a part of the EIS/EIR, and the document should be recirculated so that the public and environmental organizations and agencies have the opportunity to comment.

With respect to impacts to general wildlife, the reduced action alternative is superior to other alternatives. With respect to impacts to the desert tortoise, the reduced action alternative is probably not significantly different from the preferred alternative. ㉚

The following comments are listed by document section:

SUMMARY TABLE 1.1 (VEGETATION)

Impacts to vegetation and wildlife are not considered to be significant, although the proposed project would result in the loss or disturbance of 2,700 acres (4.2 square miles) of vegetation (wildlife habitat). This loss is significant and not mitigated. ㉛

Impacts associated with the Cadiz Valley alternative site are deemed "similar" even though this site was only subject to surveys for desert tortoise and a literature "research" effort. ㉜

CEQA states clearly that a finding of mandatory significance is required if "The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or ㉝ restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory" (Section 15065). ㉝ CONT.

The time-lag which will result from creation of functional habitat will mean that many square miles will be basically devoid of biological value and that there will be some populations which will be affected in a way that makes this finding of mandatory significance necessary. The proposed mitigation measures are not adequate to bring such impacts to a level which is less than significant. ㉞

SUMMARY TABLE 1.1 (WILDLIFE)

Impacts to the desert tortoise by ravens and potential collecting are identified for the Bolo Station site even though no tortoises were identified at this site. The raven and collection issues would seem to be an issue for the Cadiz Valley site, since at least 80 tortoise are known to be present there, but these issues were not addressed for that site. ㉟

Noise, light, and increased traffic are assumed to not impact wildlife; however, the document does not support this assumption; impacts from noise, light, and traffic are important issues which must be addressed. ㊱

For which alternative the proposed mitigation measures are designed is not clear, and the mitigation measures are often not coordinated with impacts. For example, the Summary Table and document state that increased traffic is not expected to impact wildlife; however, they also state that vehicle speeds need to be restricted, supposedly to reduce impacts to wildlife. Reduced traffic speeds would seem to be necessary for a site with desert tortoise, but this mitigation measure is required for the Bolo Station site where no tortoises were observed. ㊲

SECTION 2.6.5 (ENDANGERED SPECIES)

It is hard to imagine that in 7.5 square miles, no federal or state-listed or candidate taxa or Bureau of Land Management (BLM) species of concern (which include species identified by the California Natural Diversity Data Base [CNDDB] and the California Native Plant Society [CNPS]), were identified. These categories are much larger than just state or federally listed threatened or endangered species. Since the technical reports were not available for review, the survey methods cannot be reviewed for adequacy in addressing the issue of sensitive species within the project area. ㊳

㊳ CONT.

AFFECTED ENVIRONMENT SECTION 4.5 (VEGETATION)

The nomenclatural reference for plant community classification should be provided. The standard currently used in southern California is Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986). ㊴

Section 4.5.1-4:

A CNDDB record search is not sufficient, in and of itself, to determine the probability for the presence of sensitive taxa in the region. CNDDB records exist as part of a voluntary system of data recordation, and not every biologist participates in this activity. Therefore, the data base is not a complete record of all sensitive species, but only of those whose sightings have been recorded. Also, there are no records for areas which have not been surveyed. It is not likely that this area has been surveyed for botanical species in recent years; therefore, the likelihood of finding sensitive plants species using this predictive method would be quite low. ㊵

Appendix G should provide a separate list of the sensitive species which could potentially occur in the project and alternative site areas based upon known distributions and physical habitat requirements. It would also be helpful to know which six plant species were identified, as it is not only federal Category 2 candidates which are of concern pursuant to CEQA. CEQA guidelines state that species not included on state lists (or as candidates) shall be considered if the species can be shown to meet the criteria for state listing (Section 15380). The California Department of Fish and Game (CDFG) recognizes that Lists 1b and 2 of the CNPS Inventory of Rare and Endangered Vascular Plants of California (Smith and Berg 1988) contain plant species that, in the majority of cases, would qualify for such listing. ㊶

Section 4.5.2.1.1 (Plant Communities):

While the report does not cite a nomenclatural standard for the classification of plant communities, the desert dune scrub community described in this section would be classified as stabilized and partially stabilized desert dunes (element code ㊷

22200) by the CNDDB (Holland 1986) and, as such, is considered one of high priority. ㊷ CONT.

Section 4.5.2.2 (Cadiz Valley Alternative Site):

The botanical assessment of this alternative appears to be based primarily upon literature research and data base searches. This methodology is inadequate to determine the potential for occurrence of sensitive plant species; the site needs to be surveyed. Plant species observations made during the desert tortoise surveys are only adequate to broadly categorize the communities which exist; tortoise surveyors would be concentrating on searching for tortoise sign and not on identifying plant species. Often, biologists trained in surveying for desert tortoises are not trained in recognizing endangered and threatened plant species. Again, the fact that the lead jurisdiction and BLM did not require that surveys of this site be conducted likely would not stand up under tough CEQA scrutiny. Under NEPA, the failure to apply the same evaluation to an "alternative selected for further evaluation" is an even more serious shortcoming. ㊸

ENVIRONMENTAL CONSEQUENCES SECTION 5.5 VEGETATION

Section 5.5.1 (Bolo Station Site):

Nowhere in vegetation sections of the report is the concept of protected or sensitive plant species defined. That not one CNPS List 1b or 2 species occurs in all of this 7.5-square-mile project site, or on the 5.0-square-mile alternative site, is not likely. ㊹

Section 5.5.1-3:

The on-site habitat types are characterized as "limited in species density and diversity relative to their occurrence elsewhere in the Mojave desert" but there is no evidence in this report to substantiate this. ㊺

Section 5.5.1-4:

There is a serious question that only 300 acres would be permanently lost as a result of project implementation. Desert habitats are not easily recreated, and certainly that plant community which may become established on top of the completed landfill cells in the 50-200 years after initiation of ㊻

revegetation efforts will not be the same in terms of species composition or ecological function as that lost. Planting within one to two feet of soil which lies over an impermeable layer provides additional constraints to an already extremely difficult task. ㊻ CONT.

The feasibility of revegetating 2,400 acres of desert scrub habitat should be adequately addressed in this document. Again, the time lag initiation of revegetation efforts and the creation of a functional perennial plant community (if a perennial community can even be created) will, in effect, mean that no wildlife habitat values will exist until well past the closure of the landfill. ㊼

The statement that loss of 2,400 acres of habitat is not permanent because state regulations require implementation of reclamation activities through revegetation is not adequate. Revegetation efforts can take many forms, and the recreation of habitat which has the same ecological function (measured by comparison to predisturbance plant cover, density, and species composition data) is a significantly more complex task than this document indicates. Certainly, there will be no recreation of desert dune scrub or desert wash scrub habitats on the landfill cells. The failure to recognize this fact in the document casts serious doubt upon the biological judgment displayed. There are four communities of desert vegetation with, presumably, differing habitat values depicted in Figure 4.5.1. Yet revegetation telescopes into "restoration" of some kind of generalized desert scrub. There is no attempt to assess the type and biological value of "restored" habitat. Nowhere are restrictive factors, such as shallow root zones, taken into account. Having to wait 50 to 100 years after the completion of a landfill cell for the establishment of a functional perennial plant community does nothing to mitigate the loss to wildlife. ㊽

Desert wash plant community covers 50 acres of the Bolo Station site. Desert washes may be under the jurisdiction of the CDFG under Section 1600 of the Fish and Game Code. A Streambed Alteration Agreement with the CDFG may be required. This possible requirement is not addressed in the document. ㊾

Section 5.5 Vegetation (Mitigation Measures):

In summary, the revegetation program recommended will not reduce significant, adverse impacts to a level which is less than significant. More information on the feasibility of such a ㊿ program, including the seed mix components and revegetation methodologies, should be provided. especially since revegetation of desert plant communities has not yet been proven to be successful mitigation. ㊿ CONT.

The statement in Table 1.1 that "noise, light, and increased traffic are not expected to impact wildlife species" seems to be unfounded. (51)

How increased rail and road traffic to the site might affect the tortoise or other sensitive wildlife species in the region is not discussed. The rail line does pass through occupied tortoise habitat to the west. (52)

The impacts listed under Bolo Station Site in Table 1.1 also need to be listed under the Cadiz Valley alternative site and reduced action alternative. (53)

APPENDIX G, WILDLIFE TABLES

This table is poorly organized. Species observed should be separated from those expected. Also, tables are deceptive in that they are titled as species found at both the Bolo Station and Cadiz Valley sites, but general biology surveys were only conducted at the Bolo Station site. (54)

INADEQUACY OF AIR QUALITY ANALYSIS

1. The DEIR/DEIS relies completely on an analysis entitled "Air Quality Impact Analysis (AQIA) Bolo Station Facility, San Bernardino County", prepared by Jacobs Engineering. Although this report is listed in Section 12.0 of the DEIR/DEIS as a background technical report, available for inspection at two locations in Southern California, it is not included in the DEIR/DEIS itself. As a result, it is not possible to evaluate most of the technical assumptions upon which the air quality conclusions in the DEIR/DEIS are based. (55)

2. Maximum project emissions, at full build-out and 21,000 ton/day operations, are estimated in the DEIR/DEIS as follows: (56)

Comparison of Annual Emissions at Full Build-out
Eagle Mountain and Rail-Cycle Projects
(tons/year)

	NOx	CO	ROG	SOx	PM_{10}
Rail-Cycle (DEIR/DEIS)	1841	687	566	154	450
Rail-Cycle (Eagle Mountain EIR, Table FEIR-AQ-7)	3310	1544	462	369	375
Eagle Mountain	2792	1313	411	319	358

The major differences are attributable to different estimates of rail haul emissions (the Rail-Cycle estimates are lower than for Eagle Mountain), and the fact that the Rail-Cycle estimates don't include emissions from transfer stations. The DEIR/DEIS does not contain sufficient information to explain the difference in rail haul emissions, given the fact that the two projects haul approximately equivalent quantities of materials for approximately the same distances.

3. The worst case ambient concentrations estimated for the Rail-Cycle project are shown in the following table:

Comparison of Worst Case Ambient Concentrations at Full Build-out
Eagle Mountain and Rail-Cycle Projects
($\mu g/m^3$)

Pollutant	Average in Period	Project Impacts		Total Impacts	
		Rail-Cycle	Eagle Mountain	Rail-Cycle	Eagle Mountain
NO_2	1-hour	304	328	353	412
	Annual	87	5	93	10
SO_2	1-hour	168	51	178	267
	3-hour	66	27	74	--
	24-hour	14	7	19	88
	Annual	3	1	6	12
CO	1-hour	2,325	138	17,205	10,366
	8-hour	477	58	5,397	4,247
PM_{10}	24-hour	46	17	not shown	227
	Annual	9	2	42	24-32

The relatively flat terrain in the vicinity of the Bolo Station site would tend to result in lower air quality impacts, for a given emission rate, as compared with the Eagle Mountain project. Without information more detailed than that provided in the Rail-Cycle DEIR/DEIS, no further comparison of the results can be made. (57)

---

4. The results of the screening level health risk assessment for the Rail-Cycle project are shown in the following table: (58)

Comparison of Health Risk Screening Analyses for Emissions at Full Build-out
Eagle Mountain and Rail-Cycle Projects

	70-Year Carcinogenic Risk	Maximum Chronic Hazard Index
Rail-Cycle	$3.9x10^{-6}$	$5.7x10^{-2}$
Eagle Mountain	$2.2x10^{-6}$	$1.3x10^{-3}$

There is insufficient data in the DEIR/DEIS to fully explain the differences; however, the cancer risk analysis for the Rail-Cycle project was a multi-pathway analysis, which is different than the inhalation pathway analysis performed for the Eagle Mountain project. This may explain part of the reason why the cancer risk for the Rail-Cycle project is somewhat higher.

5. The following mitigation measures are included in the mitigation monitoring plan for the Eagle Mountain project, but are not recommended for implementation in the DEIR/DEIS for the Rail-Cycle project (references are to measure numbers in Part D of the Mitigation Reporting/Monitoring Program Checklist for the Eagle Mountain Project): (59)

1 General
1(a) - Independent oversight of air quality mitigation activities
1(b) - Periodic reports on air quality mitigation activities

2 Construction Equipment Combustion Emissions
2(a) - Limited idling time and regular preventative maintenance
2(c) - Use certified on-highway versions of engines where feasible
2(d) - Use turbocharged and intercooled engines with retarded injection timing when available

2(e) - Electric version of asphalt batch plant, if feasible
2(f) - Electric version of concrete batch plant, if feasible

3 Construction Operations - Fugitive Dust Emissions

3(b) - Covered trucks for dirt hauling, or 2-foot freeboard
3(c) - Prewater soil prior to excavation
3(d) - Use spray nozzles or baghouses with asphalt plant
3(e) - Use spray nozzles or baghouses for concrete plant
3(g) - Mechanically sweep paved roads used during construction
3(i) - Chemically stabilized blowsand areas adjacent to paved haul roads

4 Air Quality - Construction and Operation

4(i) - Install and operate two permanent PM_{10} ambient monitors, and one gaseous pollutant monitoring station (59) CONT.

5 Waste Haul Trains/Switch Engines (if any)

5(f) - Shut down locomotives when not needed for one hour or more
5(g) - Use 0.05% low sulfur Diesel fuel in locomotives
5(i) - Demonstration of low NOx (SCR or natural gas) locomotive capable of meeting a 2 gm/bhp-hr NOx emission rate
5(j) - Feasibility study for using electric rail haul for waste haul

6 Combustion Emissions During Operations

6(f) - Use on-highway certified engines in equipment, if feasible
6(g) - Use turbocharged and intercooled engines with retarded injection timing
6(i) - When available and feasible, use electric versions of overhead cranes, crushers, conveyors, pugmills, etc. If electric versions are not feasible, use alternative fuel versions, if available.
6(j) - Review the feasibility of electrification of on-site equipment every ten years.

---

7 Landfill Gas/Flare Emissions

7(a) - When gas generation rates exceed 5 million cubic feet per day, study feasibility of recovering energy from flared landfill gas .
7(b) - If energy recovery is feasible, commence energy recovery before gas generation rate exceeds 10 million cubic feet per day.
7(c) - If energy recovery is not feasible and gas generation rates exceed 8 million cubic feet per day, install oxidation catalysts on the flares to achieve an 80% reduction in CO emissions and a 50% reduction in non-methane hydrocarbon emissions. (59) CONT.
7(e) - If energy recovery is not feasible and gas generation rates exceed 45 million cubic feet per day, install urea injection (or an equivalent control system) to achieve a 30% reduction in NOx emissions.

8 Fugitive Dust During Operations

8(c) - Mechanically sweep all on-site paved roads
8(f) - All haul trucks must pass through wheel washing stations prior to leaving the site.

Implementation of these mitigation measures would appear appropriate for the Rail-Cycle project as a means to address Air Quality Impacts.

LANDFILL DESIGN ISSUES

Landfill Design

1. The proposed minimum base slope of 1% (Pg. 3-31, Section 3.3.2.1.2, Item 2) is below industry standards and may be extremely unconservative when the settlement potential of the underlying soils is fully considered. The applicant should demonstrate that the minimum 1% base slope provides for the desired long-term performance of the LCRS. (60)

2. The applicant proposes to use the 25-year, 24-hour storm event to size surface-water runoff control systems (Pg. 3-41, Section 3.3.2.1.4, Surface Water Runoff Control, Item 1). The applicant should provide a discussion of why this storm event was selected in lieu of the state standards contained in Title 23, California Code of Regulations, Chapter 15, Article 4 which require that Class III landfills be designed using the 100-year, 24-hour storm event. (61)

3. Controls for surface-water runoff that comes into contact with solid waste has not been addressed by the applicant (Pg. 3-41, Section 3.3.2.1.4). Will surface-water runoff that comes into contact with solid waste be treated as leachate? If so, how will the geonet drainage layer accommodate the flow? (62)

4. Leachate generation has not been quantified (Pg. 3-52, Section 3.3.3.1, Items 1 and 2). The applicant should quantify the potential leachate generation rate for the proposed landfill, and demonstrate that the landfill is designed to handle the associated flow. (63)

Surface Water Hydrology and Ground Water Potential Environmental Impacts

1. The applicant states (Pg. 5.4-8, Section 5.4.5) that "*point of compliance*" ground-water monitoring wells on 1000-ft center will be placed along the downgradient perimeter of the landfill footprint and that they will be sampled quarterly for a year before landfilling at each cell. Background monitoring wells are not mentioned here. The applicant should discuss upgradient background monitoring wells as required by Chapter 15 (i.e., when will wells be installed and what will be their spacing density?). (64)

Vadose (Unsaturated) Zone Monitoring

1. The vadose zone monitoring system (Pg. 5.4-8, Section 5.4.5.1) described by the applicant (Rail·Cycle, Design and Operational Features for Prevention and Mitigation of Groundwater Contamination, September 1992b) ignores monitoring for liquid releases as required by Title 23, California Code of Regulations, Chapter 15, Article 5. The applicant should address this omission. (65)

We hope the foregoing comments will be considered in your review of the EIS/EIR. Thank you for the opportunity to comment.

Very truly yours,

Gary W Johnson

Gary W. Johnson
Vice President, Landfill
Development

GWJ:sk

DOCUMENT 034
EAGLE MOUNTAIN LANDFILL AND RECYCLING CENTER RESPONSE TO COMMENTS

Response 034-1

1. The options listed on page 2-1 of the Draft EIR/EIS are options to dispose of waste that would remain after the requirements of AB 939 are achieved by cities and counties through source reductions, recycling, and composting. Only two of these options, source reduction and recycling, would affect the generation of the waste stream. An expanded discussion of the purpose and need for the proposed action was provided in Chapter 2.0 of the Supplement. This discussion outlined the projected volume of solid waste generated by metropolitan Los Angeles County (expected to be one of the primary sources of waste deposited at the Bolo Station Landfill) that will require landfilling over the next 20 years.

2. This discussion also indicated that, based on recent experience in solid waste management efforts by Los Angeles County, landfill disposal is the only feasible alternative for disposal of the waste remaining after the requirements of AB 939 are achieved. The discussion of project alternatives provided in Section 3.3 of the Supplement, clarified the evaluation of alternatives to landfill disposal (including alternative waste management practices and alternative disposal technologies) and eliminated them from further consideration due to their inability to meet basic objectives of the proposed action, and/or their potential to result in environmental impacts equal to or greater than those of the proposed action.

3. As shown in Table 2.3 of the Supplement, even with the proposed expansion of existing landfills in Los Angeles County, the County will experience an approximate 3,700-ton per day shortfall in solid waste disposal capacity by 1995. Without development of substantial additional landfill capacity, even with implementation of AB 939's mandated source reduction and recycling requirements, this shortfall is projected to increase to over 10,000 tons per day by 1998. The proposed action would accommodate up to 21,000 tons per day of solid waste.

4. As shown in Table 2.4 of the Supplement, with implementation of the proposed action, Los Angeles County's short-term solid waste disposal crisis would be averted. While the proposed Bolo Station Landfill would avert the short-term solid waste disposal crisis in Los Angeles County, the proposed action would not be able to fully accommodate Los Angeles County's long-term solid waste disposal needs. Table 2.4 shows that a projected 14,000-ton per day shortfall would develop by 2013.

Response 034-2

1. Design refinements to the onsite landfill control systems since distribution of the Draft EIR/EIS were presented in Section 3.2.4 of the Supplement. Section 3.2.4.1 of the Supplement discussed refinements in the design of the liner which would mitigate the potential impacts from reintroduction of leachate into the landfill. An analysis was conducted that demonstrated that the alternative liner would exceed the performance requirements of 40 CFR 258.28(a)(2) for a composite liner and leachate collection system, if leachate and condensate were to be reintroduced into the waste column (Rust, 1993a).

2. Section 3.2.4.2 of the Supplement detailed the proposed leachate evaporation ponds that would be constructed in the event that reintroduction of leachate is not approved. The leachate evaporation ponds would be lined as detailed in Section 3.2.4.2 and as shown on Figure 3.3 of the Supplement. In addition, lysimeter would be installed beneath the leachate collection sumps to verify the integrity of liquid containment.

Response 034-3

1. Based on comments on the Draft EIR/EIS, additional information regarding the landfill gas flare/energy recovery facility proposed for the landfill was provided in Section 3.2.4.4 of the Supplement.

2. Air emissions from the landfill gas flare were included in the air quality analysis in the Draft EIR/EIS (see Section 5.7.1 of the Draft EIR/EIS). As it would be speculative to discuss the specific energy recovery facility, it would also be speculative to address potential air emissions from a potential energy recovery facility.

Response 034-4

1. The environmentally superior alternative is identified as the "No Action" alternative. When other alternatives are considered, the proposed action is identified as environmentally preferable, as stated in Section 1.7 of the Draft EIR/EIS. As discussed in Section 1.2 of the Draft EIR/EIS, the proposed action is the BLM's preferred alternative.

Response 034-5

1. Section 3.3 of the Supplement provided clarification of the project alternatives and explained how they were developed, evaluated, and selected for further analysis in the EIR/EIS. This discussion includes clarification of the selection criteria for offsite alternatives. Criteria applied for alternative selection focus on siting and operational criteria, which are necessary to meet the project's basic objectives for rail-haul transport and landfill disposal of solid waste generated by Los Angeles County. Sites that met these basic criteria were subjected to a more detailed screening based on environmental factors. Sites with the potential to substantially accomplish project objectives with reduced significant environmental effects, as compared to the proposed action, were evaluated in detail in Chapters 4.0 and 5.0 of the Draft EIR/EIS.

2. Implementation of the potential project alternatives would enable the County and/or BLM to fulfill their statutory responsibilities. With regard to BLM, its responsibility in relation to the proposed action is to assure that exchange of public land is for equally valuable lands. Any alternative which required use of public lands would initiate an exchange with the BLM as described in Section 3.2 of the Draft EIR/EIS.

Response 034-6

1. The proposed landfill is a privately sponsored venture. As the lead agencies responsible for assuring compliance with CEQA and NEPA, the County and BLM have no specific "objectives" for the proposed action other than to assure that applicable existing local, state and federal regulations are met during the environmental review, permitting, construction and operations phases.

2. The proposed action's concept and objectives support the principle of maximum environmental protection. As stated in Chapter 2.0 of the Supplement, a key aspect of the proposed action's purpose is to: "Develop long-term municipal solid waste landfill capacity in a remote desert setting so as to: (1) provide a state-of-the-art landfill to dispose of the residual waste following source reduction and recycling programs; (2) minimize land use compatibility conflicts often faced by landfills sited near residential or other urban areas; and (3) minimize potential environmental impacts, especially in the areas of air and water quality, as these effects would be reduced in an arid environment."

3. The Cadiz Valley Alternative site was selected for analysis based on its ability to meet basic siting and operational criteria, as well as indications determined during the second-tier environmental screening of alternatives of its potential to result in a reduction of significant environmental effects, as compared to the proposed action. Despite preliminary indications that the Cadiz Valley Alternative site might result in reduced significant environmental effects, detailed analysis of the site conducted during preparation of the EIR/EIS revealed potential significant environmental effects equal to or greater than those of the proposed site. For more information on how the Cadiz Valley Alternative site was selected for detailed evaluation in the EIR/EIS, see Section 3.3 of the Supplement.

Response 034-7

1. Section 3.3 of the Supplement provided clarification of the preliminary screening for environmental factors applied to potential offsite alternatives. Biological factors were one of several issues considered when deciding whether or not a site merited further consideration in the EIR/EIS. In the case of the Cadiz Valley Alternative site, potentially significant biological impacts sufficient to eliminate the site from detailed analysis were not readily identifiable during the second-tier screening; for example, the site is located within uncategorized habitat for the desert tortoise, as is the proposed site. If the site had been categorized as Category 1 or 2 desert tortoise habitat, as compared to the uncategorized habitat of the proposed site, a determination may have been appropriate to rule out the site as a potential alternative. However, without such conclusive information, and because the site met other basic siting and operational criteria, it was determined that further evaluation was merited. This evaluation included a desert tortoise survey of the site, which concluded that the site is in the lower range of quality habitat for the desert tortoise.

2. The Cadiz Valley Alternative site is not located within the lands designated as sensitive for biological and paleontological resources under the County General Plan. The reference made in Section 4.14.1.1.1 of the Draft EIR/EIS is to the proposed Bolo Station site.

3. Although a portion of the Cadiz Valley Alternative site was located within a non-recommended preliminary wilderness area, the site is not located within lands designated for protection under the proposed California Desert

Protection Act. Due to the Act's comprehensive nature, it is probable that areas not included for protection under the Act will no longer be subject to the guidelines of the non-recommended preliminary wilderness area designation.

Response 034-8

1. Size criteria for the proposed action (1,500 to 2,000 acres as determined necessary to provide a minimum 50 years of capacity) was detailed in Section 3.3 of the Supplement. This is substantially smaller than the Bolo Station site (4,870 acres) or the Reduced Action Alternative (3,200 acres). Environmental factors (which were identified in Table 3.3 of the Supplement), not size consideration, eliminated other offsite alternatives form further consideration.

Response 034-9

1. As stated in Section 3.3 of the Supplement, alternative sites were evaluated, in part, based on their location along a major rail line, including an ATSF line. Location along a non-ATSF line was not a reason for rejection of potential alternative sites.

2. Sufficient available acreage refers to enough acreage to accommodate the landfill footprint for the Reduced Action Alternative (approximately 1,780 acres).

Response 034-10

1. As discussed in Section 3.3 of the Supplement, for a site to be considered a reasonably feasible alternative to the proposed site, the land must be owned by or have the potential to be acquired by Rail•Cycle for use as a landfill. The Eagle Mountain site was eliminated from detailed consideration in the EIR/EIS because it is being actively proposed for a rail-haul landfill by another applicant and could not reasonably be considered to be available to Rail•Cycle for purposes of implementing its waste-by-rail concept. The Niland site was also eliminated due to the fact that it is not owned by Rail•Cycle and the site is also being considered by another applicant for a rail-haul landfill.

Response 034-11

1. As discussed in Response 034-10, the Eagle Mountain site was eliminated from detailed consideration in the EIR/EIS because it is being actively proposed for a rail-haul landfill by another applicant and could not reasonably be considered to be available to Rail•Cycle. With regard to the respective environmental documents' conclusions about the significance of project impacts and the effect of proposed mitigation measures, it is important to note that the Eagle Mountain EIR/EIS may have utilized different methodologies and applied different thresholds of significance in determining which of Eagle Mountain's environmental effects should be considered significant and unavoidable, and which could be mitigated below a level of significance. Furthermore, although the documents share a common lead agency in the BLM, the approach and conclusions authorized by the local lead agencies (San Bernardino County for the proposed action and Riverside County for Eagle Mountain) may differ.

2. In identifying significant unavoidable impacts in the areas of visual resources, land use, socioeconomics, air quality and ground water supply, San Bernardino County elected to employ a conservative approach to environmental analysis. It is the position of San Bernardino County that these impacts would occur for a waste-by-rail landfill of the size proposed by Rail•Cycle and for Eagle Mountain no matter where the project was located within the greater southern California desert area. Therefore, under the approach employed by San Bernardino County, Eagle Mountain would be expected to incur the same significant environmental impacts as the proposed action.

3. For more information on waste generation volumes in southern California as they relate to the purpose and need for the proposed action, see Chapter 2.0 of the Supplement.

Response 034-12

1. Potential investment by a landowner or railroad owner was not one of the criteria applied in the clarified discussion of project alternatives. As discussed in Section 3.3 of the Supplement, various sites, including those mentioned by the commenter, were rejected due to their inability to meet basic siting and operational objectives.

2. Tehachapi was rejected due to insufficient area. At only 1,050 acres, the site could not accommodate even the Reduced Action Alternative landfill footprint, as well as provide space for appurtenant facilities or buffer zones. Eagle Mountain and Niland were rejected due to the fact that they are already proposed for a rail-haul landfill by another applicant and could not reasonably be considered to be available to Rail•Cycle for its use.

3. The Morongo Indian Reservation was rejected due to the time frame involved for site acquisition, which affects feasibility and the applicant's ability to meet project objectives, which is mainly to provide disposal capacity to meet the projected demand for municipal solid waste landfill space.

Response 034-13

1. The purpose of the alternative evaluation is to identify sites with the potential to result in reduced significant environmental effects as compared to the proposed action. As stated in Section 3.3 of the Supplement, it is the determination of the County and BLM that construction of a rail spur or a major highway would result in significant unavoidable environmental impacts above and beyond those identified for the proposed site. Therefore, although construction of a rail spur or access road would be technically feasible, the fact that construction would result in greater environmental impacts than the proposed action justifies rejection of potential alternatives which require construction of a spur (Hector) or major access road (Ward Valley).

Response 034-14

1. This discussion in Section 3.3 of the Supplement clarified the selection criteria for offsite alternatives. Regarding the Tehachapi site, while that fact the site is on the Southern Pacific rail line was a factor in eliminating this site, the primary reason the site was eliminated from further consideration was due to insufficient area. At only 1,050 acres, the site could not accommodate even the Reduced Action Alternative landfill footprint, as well as provide space for appurtenant facilities or buffer zones.

Response 034-15

1. The criteria upon which sites were evaluated and eliminated or recommended for further study were developed based in part on the applicant's objectives for the proposed action as well as the feasibility for the applicant, a private industry, to implement the project. Because Rail•Cycle cannot develop the Eagle Mountain site, it does not represent a reasonable, feasible alternative to the proposed action. If the EIR/EIS were evaluating potential alternatives to a public project proposed by a public agency with the power of eminent domain, such as BLM or the County, then site ownership or ability to acquire a site would not necessarily be a determining criterion, as the agency could condemn the land and utilize it for its own purposes. In the case of a private project, such as the proposed action, it is not reasonable to evaluate in detail a site that cannot feasibly be used by the applicant for the proposed action.

2. As noted in Chapter 6.0 of the Draft EIR/EIS and Supplement, the proposed Eagle Mountain Landfill is considered as a cumulative project of the Supplement, for this EIR/EIS.

Response 034-16

1. As discussed in Section 3.3 of the Supplement, Locales F, H and I were eliminated from further consideration due to the fact that they lie within the boundaries of proposed wilderness areas designated for protection under the California Desert Protection Act.

2. As stated previously, the purpose of the alternative evaluation is to identify sites with the potential to result in reduced significant environmental effects as compared to the proposed action. As stated in Response 034-13, it is the determination of the County and BLM that construction of a major access road would result in significant unavoidable environmental impacts above and beyond those identified for the proposed site.

Response 034-17

1. As discussed in Section 3.7 of the Draft EIR/EIS and refined in Section 3.3 of the Supplement, potential alternatives sites were identified based on specific siting, design and operational criteria for a rail-haul landfill. These criteria were applied to a regional map to screen out unsuitable sites. Sites that met basic siting and operational criteria were then subjected to a second-tier review, which evaluated site-specific environmental concerns. Based on this evaluation, specific alternatives were selected to be evaluated in detail in the EIR/EIS. The approach was identical to that recommended by the commenter, in which an area (i.e., the southern California desert) was identified and siting, operational and design criteria, followed by environmental constraints, were applied for the selection of specific sites.

Response 034-18

1. As discussed in Section 3.3 of the Supplement, the Oro Grande site was eliminated based on several basic siting and operational factors, including size (75 acres), proximity to urban uses and unavailability of land for acquisition by Rail•Cycle. Eagle Mountain was rejected due to the fact that it is already proposed for a rail-haul

landfill by another applicant and could not reasonably be considered to be available to Rail•Cycle for its use. Dunn was eliminated due to insufficient area (285 acres).

Response 034-19

1. The commenter correctly notes that specific environmental effects of each alternative selected for further evaluation are discussed in the environmental impact section of the Draft EIR/EIS (Chapter 5.0). The purpose of Section 3.3 of the Supplement was not to include a separate rigorous evaluation of potential alternatives, but to clarify the basis upon which selected alternatives were chosen. The discussion is necessarily shorter, as its purpose is not to conduct an exhaustive comparison of the alternatives eliminated from the analysis, but only to demonstrate the means by which the chosen alternatives were selected.

Response 034-20

1. The analysis of noise and traffic impacts along the rail routes that would transport waste from the proposed MRFs in southern California, to the proposed landfill, has been revised to include rail routes in Los Angeles, Orange, Riverside and Kern counties. The analysis for the other counties has been accomplished at the same level as the analysis in the Draft EIR/EIS for San Bernardino County and was included in Chapters 4.0 and 5.0 of the Supplement.

Response 034-21

1. Potential noise impacts associated with the proposed action have been clarified as part of the subsequent analysis for the Supplement (Sections 4.5 and 5.5). The analysis indicated that noise impacts would not be significant and therefore do not require mitigation.

Response 034-22

1. The reference in the Draft EIR/EIS to transfer stations in desert locales is provided as an example of how communities with low population densities could achieve their waste disposal needs and recycling goals. Section 3.2.2 of the Draft EIR/EIS states that ". . . various types of community recycling programs and waste transfer stations could be (emphasis added) employed to standardize separation of recyclables" (page 3-7). It is clear, as presented in the Draft EIR/EIS, that the referenced waste transfer stations are not part of the proposed action.

2. As discussed in the Draft EIR/EIS measures to accommodate waste disposal needs in desert communities such as Needles and Yucca Valley will need to be considered to accommodate the needs of these communities once local landfills reach capacity. As specific concepts have not been developed by these communities to tie into the proposed Rail•Cycle system, it would be speculative to discuss the potential impacts that could occur if they choose to send their waste to the proposed landfill. Regarding potential transfer stations, the Draft EIR/EIS specifically states that, ". . . CEQA compliance and permitting would be accomplished on an as-needed basis." As CEQA and NEPA do not require speculation, further evaluation is not required for this EIR/EIS.

Response 034-23

1. As discussed in Section 5.12.1.1.2 of the Draft EIR/EIS, Rail•Cycle rail traffic is expected to be on ATSF lines, including its operations in the Los Angeles Basin. As noted in the Draft EIR/EIS for the proposed Eagle Mountain Landfill, rail traffic destined for Eagle Mountain is proposed to be on Southern Pacific rail lines (BLM and County of Riverside, 1991).

2. Based on the above, the use of ATSF rail lines by more than one of the proposed waste-by-rail projects is not expected. In the event the siting of an MRF to serve one of the other proposed waste-by-rail projects results in additional train traffic on a segment of the ATSF rail line designated by Rail•Cycle, the impacts would be addressed in the CEQA document for the specific MRF.

Response 034-24

1. This comment expresses the concern that noise impacts resulting from rail traffic should have been calculated in San Bernardino, Los Angeles, Orange, and Riverside counties, rather than for only San Bernardino County, as presented in the Draft EIR/EIS. We agree with this comment, and in response have extended the noise, automobile traffic delay and hazard analyses accordingly. The revised analyses were included in Chapters 4.0 and 5.0 of the Supplement.

Response 034-25

1. See Response 034-21.

Response 034-26

1. See Response 034-21.

Response 034-27

1. According to Section 15355 of the CEQA Guidelines, cumulative impacts refer to ". . . two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The proposed Mesquite Regional Landfill referenced in this comment would be located approximately 110 miles south of the proposed Bolo Station Landfill and about 65 miles south of the proposed Eagle Mountain Landfill. The active or potential projects evaluated in the Rail•Cycle EIR/EIS cumulative impacts analysis are within a broad sphere of influence within a radius of approximately 50 miles from the proposed Bolo Station Landfill (see Chapter 6.0 of the Draft EIR/EIS). The proposed Mesquite Regional Landfill is clearly outside of this geographic area.

2. In the event that the two facilities (Rail•Cycle and Mesquite) were in simultaneous operation, the distance between the two projects would preclude individual environmental impacts from the two facilities from being cumulative. There could, however, be operational impacts, as simultaneous operation of the two facilities might result in less waste per day being delivered to each facility. This would result in a daily fill rate that is less than current projections for either facility alone. Such a scenario could extend the life of both facilities. Although the potential for such occurrence is noted, further evaluation would be speculative at this time.

3. It is acknowledged that both the proposed Bolo Station and Mesquite facilities would be located on land that is now publicly owned and managed by BLM. Because BLM policy precludes landfills from being operated on federal lands, both projects involve land exchanges to compensate for lands that would be utilized for landfill activities. Therefore, a cumulative diminishment of federal lands would not be a potential impact of concurrent development of the proposed Bolo Station and Mesquite facilities.

4. The Mesquite Regional Landfill, plus other potential sites in Imperial County, were not evaluated in the Rail•Cycle - Bolo Station Landfill Draft EIR/EIS as they are outside the region of consideration for site-related cumulative impacts. There is no feasible overlap of air, water, or other resources. Rail transport for the proposed Bolo Station Landfill would be provided by ATSF, while Southern Pacific rail lines would be utilized for the proposed Mesquite project; therefore, rail transport impacts would not be cumulative. Potential cumulative impacts related to future MRFs in the Los Angeles urban area would be appropriately addressed in site-specific CEQA documentation.

Response 034-28

1. The comment regarding the omission of cumulative land use impacts associated with CLC (Pacific Agriculture) in the Draft EIR/EIS is correct. Chapter 6.0 and Table 6.1 of the Supplement were revised to include the cumulative land use impacts from CLC.

Response 034-29

1. Sections 4.5, 4.6, 5.5, and 5.6 in the Draft EIR/EIS summarized the various biological technical reports prepared for the proposed Bolo Station Landfill. These sections also included the findings of the site specific technical reports, and other reference materials that were used as a basis for the Draft EIR/EIS.

2. Chapter 12.0 of the Draft EIR/EIS included a list of the numerous technical reports that were prepared by Rail•Cycle and utilized to address potential impacts of the proposed action. Together, these reports constitute a small library of materials (i.e., over 2,500 pages) that relate to various aspects of the EIR/EIS evaluation. As stated in Chapter 12.0 of the Draft EIR/EIS and on the Draft EIR/EIS Cover Sheet, these materials are available for public review at the San Bernardino County Planning Department and the BLM-Needles Resource Area.

3. The inclusion of a listing of the available technical reports in Chapter 12.0 of the Draft EIR/EIS meets the requirements of CEQA and NEPA and their implementing guidelines. Specifically, in accordance with CEQA (Section 21061 of the Public Resources Code), the technical reports have been made a part of the public record through their inclusion in the listing in Chapter 12.0 of the Draft EIR/EIS; in accordance with Section 15147 of the Guidelines for Implementation of CEQA, the information from the technical reports is summarized in the Draft EIR/EIS and appropriately referenced throughout the Draft EIR/EIS.

4. Including the findings of the technical reports in the Draft EIR/EIS and making the technical reports available for public review meets the intent of CEQA and NEPA. It also balances the need to provide information on the impacts of a proposed action in a concise document with the potential cost of reproducing and distributing several thousand pages which only a limited number of commenters may wish to review. As the Draft EIR/EIS was made available for a 90-day public review and comment period, interested commenters had sufficient time to contact the County or BLM to make arrangements to review the technical reports.

Response 034-30

1. This comment is partially correct. The Reduced Action Alternative would entail a smaller landfill footprint than the proposed action. Therefore, the impacts to wildlife in general would be less, due to a reduction in the amount of habitat disturbance in comparison to the proposed action.

2. An additional concern regarding biological resources and the proposed action are the potential impacts to the desert tortoise. Since there are no tortoises on the Bolo Station site and the site does not provide quality habitat for the tortoise, the "no-impact" finding with respect to the desert tortoise would not change by reducing the project scope through the selection of the Reduced Action Alternative. As stated in Section 3.7.1.2 of the Draft EIR/EIS, the Reduced Action Alternative would require only one section of BLM land, thereby reducing from three to one the number of sections of offered lands associated with the proposed action. Therefore, the selection of the Reduced Action Alternative would eliminate the opportunity for BLM to acquire two additional sections of Category 1 desert tortoise habitat that otherwise may be subject to future private use. From this standpoint, the Reduced Action Alternative is considered inferior to the proposed action.

Response 034-31

1. The information that supports the findings related to vegetation included in Table 1.1 was presented in Section 5.5 of the Draft EIR/EIS. The loss or disturbance of 2,700 acres would occur incrementally over the 60- to 100-year life of the landfill. During the initial six- to nine-month construction period, approximately 360 acres would be disturbed. On an annual basis, a range of 50 to 200 acres would be disturbed for the phased development of landfill cells. Previously disturbed areas would be in the process of being reclaimed and revegetated while a new area was being disturbed. Closure/postclosure procedures, including revegetation, would be implemented following the capping of the closed cell. Thus, reclamation of the landfill footprint would be conducted on a continuous basis throughout the life of the site and during postclosure monitoring and maintenance. As stated in Section 5.5 of the Draft EIR/EIS, it is expected that about 300 acres would be permanently lost as a result of the proposed action.

2. Section 5.5 of the Draft EIR/EIS defines impacts to vegetation as being significant if they would result in one or more of the following:

   - Disturbance or destruction of protected or sensitive plant species.
   - Disturbance or destruction of habitat that supports protected or sensitive species.
   - Substantial diminishment of a plant community.

   Based on results of the impact analysis, none of these significant impacts would result from implementation of the proposed action. No protected or sensitive plant or animal species have been identified on the site. While the proposed action would disturb 2,700 acres over the life of the project, it would not substantially diminish specific plant communities that are widespread throughout the Mojave Desert. Further, it is expected that revegetation would occur on all but 300 acres of the area disturbed for the landfill and appurtenant facilities. For these reasons, no significant unavoidable adverse impacts to vegetation are anticipated.

Response 034-32

1. Information regarding vegetation at the Cadiz Valley Alternative site presented in Sections 4.5.2.2 and 5.5.2 of the Draft EIR/EIS was based, as referenced, on information from various sources. A literature search was conducted to identify sensitive plant species that might occur either on the alternative site or in the vicinity. No protected or sensitive plant species were reported for the Cadiz Valley Alternative site.

2. The literature search was supplemented with data provided by the desert tortoise survey team, with experience in the identification of plant taxa. The tortoise survey team used plant species identification to aid in assessing the habitat during the onsite study. As a result of this study, the desert tortoise was found to be resident on the Cadiz Valley Alternative site. This knowledge

was critical in evaluating the suitability of the Cadiz Valley Alternative site, relative to the Bolo Station site that is known to be free of desert tortoise population. For these reasons additional research, specific to gaining more information about onsite plant species, was determined unnecessary as it would not have facilitated the decision-making process.

Response 034-33

1. As discussed in Sections 5.5 and 5.6 of the Draft EIR/EIS, and based upon plans for construction, operation, and closure/postclosure of the proposed landfill, and the results of onsite and regional vegetation and wildlife studies, it was determined that the proposed action would not have a significant effect on plant or wildlife species. The impacts identified for plant and wildlife species do not meet the criteria for significance for vegetation and wildlife defined in Sections 5.5 and 5.6 of the Draft EIR/EIS (see Response 034-31).

Response 034-34

1. Section 5.5 of the Draft EIR/EIS presented detailed information on impacts to vegetation from implementation of the proposed action. As discussed, the proposed action would result in the disturbance of 2,700 acres. Of the area to be disturbed, approximately 360 acres would be impacted for construction of landfill facilities. Thereafter, a maximum of 200 acres would be disturbed at any one time to accommodate landfilling operations. The landfill would be developed on a phased, cell-by-cell basis, with revegetation designed to occur upon completion of each cell and application of final cover over the 60- to 100-year life of the facility. In this manner, distribution and reclamation of the 2,700 acres would occur incrementally. At no time would "many square miles" be devoid of biological value as suggested in this comment.

2. Based on comments regarding the effectiveness of the mitigation plan, the topsoil layer over final cover was increased to 2 to 3 feet, from 1-foot as described in the Draft EIR/EIS. This change was made after communication with the NPS - Joshua Tree National Monument Center for Arid Land Restoration and was described in Section 3.2.7 of the Supplement.

3. A mitigation measure has been included requiring Rail•Cycle to develop a detailed revegetation plan for the proposed landfill in consultation with NPS, Joshua Tree National Monument. This mitigation measure includes a requirement that Rail•Cycle establish a nursery at Bolo Station for germination and growth of native plants for use in revegetation at the landfill. These nursery-grown native plants would be transplanted to the closed cell and planted in an island configuration, similar to the surrounding vegetated communities. Plants would be artificially watered for one to two months. If drought conditions exist, the irrigation would continue for several months, thereby enabling the shrubs' root systems to become established. Overhead irrigation may be temporarily used on the landfill sideslopes to assist in the initial establishment of the revegetation; however, only a drip irrigation system would be used on the top slopes of the landfill. If long-term irrigation is required on the sideslopes, a drip irrigation system shall be installed.

4. As discussed in Response 034-31, no protected or sensitive plant or animal species have been identified on the site. While the proposed action would disturb 2,700 acres over the life of the project, it would not substantially diminish specific plant communities that are widespread throughout the Mojave Desert. Further, it is expected that revegetation would occur on all but 300 acres of the area disturbed for the landfill and appurtenant facilities. For these reasons, no significant unavoidable adverse impacts to vegetation are anticipated.

Response 034-35

1. As noted by this comment, potential impacts to desert tortoise identified for the Bolo Station site would apply to a greater degree at the Cadiz Valley Alternative site. The raven issue at Cadiz Valley Alternative site has been taken into consideration. In conjunction with the BLM, Rail•Cycle initiated a raven study which began in December 1992 and continued for a 12-month period. The study area covers a 30-mile radius from the proposed Bolo Station Landfill, including the Cadiz Valley Alternative site.

Response 034-36

1. Noise from ATSF train traffic has been a part of the environment at the site and the rail corridor for over a century. General wildlife species and sensitive and/or endangered species (desert tortoise) have not been greatly impacted by train traffic even in Category 1 and 2 tortoise areas near Barstow and Victorville. While urban encroachment of the desert has been noted as adversely impacting the tortoise, the rail lines and train traffic that cross the desert have not been

identified as an impact to this species (BLM, 1988). Other landfill-related operations associated with the proposed action would have localized noise. This noise is not expected to have an adverse impact to the desert tortoise, as the species does not inhabit the site and the site would be fenced to prohibit immigration of tortoise from elsewhere in the region.

2. Lighting at the Bolo Station Landfill facilities would be specific to the facility being lighted. Lights would be downcast, thereby limiting their influence to the immediately surrounding area by minimizing back lighting. Wildlife species are not expected to be impacted by the directional lighting beyond 300 yards of the major lighted areas. Impacts to general wildlife species from the proposed action (including noise, lighting, and traffic) were addressed in Section 5.6 of the Draft EIR/EIS. Impacts to general wildlife species (i.e., species that are not identified as sensitive or protected), while unavoidable, are not considered significant and adverse by CEQA and NEPA.

3. Increased truck and car traffic to the site would be minimal. Under the air quality mitigation program, workers would be encouraged to car pool, thereby reducing vehicles miles, air emissions, and endangerment of animal species.

Response 034-37

1. Mitigation measures (listed in Table S.2 of this Final EIR/EIS) would apply to the proposed action and each of the alternatives listed. With respect to the example included in this comment, desert tortoise protection and mitigation measures required for the proposed site were dictated by the USFWS as part of the Section 7 consultation process, even though no tortoise were found on the site.

Response 034-38

1. Wildlife surveys and specific studies of sensitive species were conducted at the Bolo Station Landfill site and the Cadiz Valley Alternative site. Methods used to survey the site for sensitive species were deemed appropriate by the County and BLM to meet the requirements of CEQA and NEPA. The techniques used during the surveys are detailed in the technical reports prepared to support the Draft EIR/EIS. These technical reports were referenced and listed in Chapter 12.0 of the Draft EIR/EIS, and are available for public review.

2. Sections 4.5 and 4.6 of the Draft EIR/EIS provided summaries of the survey techniques and the findings of the surveys. In response to this comment, a more detailed discussion of the survey techniques is provided below:

- **Literature Search**. A literature review and search was conducted by Jacobs Engineering Group, Inc. and Ecological Research Services, Inc. for sensitive biological resources in the region surrounding the Bolo Station site. The review and search encompassed a 30-mile radius of the proposed site, selected to provide an area small enough to evaluate effectively, yet large enough to represent a regional study.

- **General Wildlife Inventories**. At the time of the survey, the USFWS classified habitat within the range of the desert tortoise based on known densities and estimated habitat potential. The classifications used by USFWS ranked habitat from most important (Class 1) to least important (Class 3). Class I habitat was defined as those areas where there was a high probability of encountering desert tortoises. Class 2 and Class 3 areas had increasingly reduced probabilities of encountering tortoises because of reduced habitat quality of the area itself or surrounding areas. Class 3 areas are believed not to host tortoises.

  BLM's tortoise habitat categories, ranging in decreasing importance from Category 1 to Category 3, were designed as management tools to ensure future protection and management of these areas and their associated tortoise populations (BLM, 1988). These categories are based on tortoise density and the quality of the habitat, in combination with other land use conflicts and estimated local tortoise population trends. Category 1 habitat areas are considered essential to maintenance of large, viable populations, have primarily medium to high density populations, and have resolvable conflicts. Category 3 habitat areas are not considered essential to maintenance of viable populations, are thought to have low to medium density populations isolated from higher density populations, or have unresolvable conflicts. Category 2 habitat areas are intermediate between the other two. Noncategorized habitat is treated as Category 3 (Foreman, 1992).

USFWS's habitat class maps for desert tortoises show the Bolo Station site and surrounding area as Class 3. BLM's tortoise category maps do not show the project site to be in any category. Thus, if tortoises are present on the site, it is defined by BLM as Category 3 (BLM, 1989).

- **Desert Tortoise Studies**. BLM and the County requested a 100 percent tortoise survey on all sections of the proposed Bolo Station site. In agreement with USFWS, its suggested protocol for tortoise surveys was used (USFWS, 1990). This consisted of a 100 percent walkover of the land, with transects spaced at 10-yard intervals. Approximately 1,030 one-mile transects were walked over 7.5 sections of land (156 to 182 transects per section). Tortoise signs (e.g., burrows, scat, tortoises, carcasses, tracks, drinking sites, and eggshell fragments) observed were recorded, mapped, and described according to size and condition. Additionally, canid scat, raptor pellets, and woodrat nests were examined for tortoise parts to establish tortoise presence.

  Habitat was mapped, noting vegetation, soils, topography, and locations of individual disturbances. The aspect-dominant perennial and annual vegetation were recorded, as well as the less common species; plant density was estimated ocularly. Topography was described, as well as relief height, slopes, and the nature of the drainage. Substrate and soils were cursorily examined to provide an estimation of course particulate content, consistency, and texture.

  To estimate the effects of the proposed action on tortoises whose home ranges might intersect the Bolo Station site, tortoise presence was assessed within one mile of the facility border north of the railroad. South of the railroad as agreed by the USFWS and BLM, no such assessment was conducted because the habitat was too poor as a result of the influence of the dry lake. A "zone-of-influence" transect was walked around the eastern, northern, and western sides of the block formed by Sections 5, 8, and 9 at 110, 220, 440, 880, 1,320, and 1,760 yards from and parallel to these sections (USFWS, 1990). Each transect was 10 yards wide and walked by an experienced biologist. Tortoise sign and habitat features were recorded.

- **Kit Fox Studies**. A survey of kit foxes on the Bolo Station site was conducted in two field sessions. For both field sessions, three biologists walked transects at 450-foot intervals in a north-south direction. Each observer censused a strip 200 feet wide. Because kit foxes often make burrows in clusters, there is usually a mound associated with the burrows that can be observed on the sparsely vegetated desert floor for some distance (Ecological Research Services, 1992a).

- **Wintering Bird Survey**. The survey was conducted by driving all existing roads on and around the proposed site. During each survey, the tamarisk row along the railroad tracks west of Cadiz was also observed.

- **Plant Survey**. The study area consists of those portions of the proposed site that could be disturbed (i.e., main landfill site, located south of the railroad, and the potential future composting site located north of the railroad). The area was surveyed by driving most of the dirt roads in and adjacent to the study area and by walking areas where no roads exist. Plant species observed were recorded.

- **Regional Wildlife Study**. A regional wildlife study was completed and included terrain within a 30-mile radius of the Bolo Station site (Ecological Research Services, 1992). A search of the California Natural Diversity Database (CDFG, 1991) was completed for the regional analysis.

3. Results of these studies were described in Sections 4.5 and 4.6 of the Draft EIR/EIS. The results are utilized as the basis for the impact analysis presented in Sections 5.5 and 5.6 of the Draft EIR/EIS. Copies of the technical reports for each of these are available at the County Planning Department and the Needles Resource Area BLM (see Response 034-29).

Response 034-39

1. The nomenclatural references for plant community classification used in the Draft EIR/EIS were:

   - California Department of Fish and Game. 1988. *California Natural Diversity Database*. Cadiz, Amboy, Bristol Lake NW and Calumet Mine quadrangles.

   - Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program. California

Department of Fish and Game, Sacramento, CA. 156 pp.

- Munz, P.A. and Keck, D.D. 1959. *A California Flora.* University California Press, Berkeley. 1981 pp.
- Smith, J.P., Jr., and Berg, K. 1988. *Inventory of Rare and Endangered Vascular Plants of California.* California Native Plant Society, Special Publication No. 1. 168 pp.
- Thorne, R.F. 1982. *The Desert and Other Transmontane Plant Communities of Southern California.* Aliso 10:219-257.

Response 034-40

1. It is not the intent of CEQA or NEPA to require an applicant to complete a taxa survey for a 30-mile radius of the proposed project area. For purposes of CEQA and NEPA, it is appropriate to use sources, such as the California Natural Diversity Database, to provide the information for sensitive taxa on a regional basis, thereby providing a focus for site-specific surveys and investigations. This is the method used for the proposed action. As specific projects, such as Rail•Cycle, perform the necessary plant and animal surveys pertaining to their specific sites, that information is added to the California Natural Diversity Database, thereby expanding the available information.

Response 034-41

1. The six sensitive species identified to potentially occur within the study region were listed in Section 4.5.1 of the Draft EIR/EIS. None of these species were found to occur onsite. A separate table to list these species is not necessary.

Response 034-42

1. See Response 034-39 for a listing of the references used in the Draft EIR/EIS for plant community classifications.

2. The loss of stabilized dunes would be limited. The sandy areas on the site are mostly stabilized dunes and occur along the margin of Bristol Dry Lake. The sandy area is approximately 10 percent of the main site area, or 480 acres. Thirty-three species of plants were recorded for this dune community during the annual plant survey. Only a few species are able to tolerate the alkaline habitat of the Bristol Dry Lake shoreline.

3. Stabilized desert dunes are located in the southwestern borders of the landfill footprint; much of the dunes area is within the 500-foot buffer zone. Additionally, some dune acreage that is located within the 100-year flood plain has been deleted from the landfill footprint and added to the buffer area.

Response 034-43

1. See Response 034-32.

Response 034-44

1. For purposes of the Draft EIR/EIS, BLM's definitions of protected or sensitive plant species were used. These definitions were included in Section 2.6.5.3 of the Draft EIR/EIS. See Response 034-41.

Response 034-45

1. Section 4.5.2.1.1 of the Draft EIR/EIS provided evidence to explain the finding of relative depauperate vegetation on the proposed project site. This section explained that the limited vegetation species and diversity as likely due to two factors:
   - Salinity associated with Bristol Dry Lake.
   - Levees along the rail line.

2. Minor increases in salinity are known to be a factor in the elimination of species from an area, and the dry lake is a source of windblown salt. The existing levees north of the rail line serve to artificially channel water through the southern portion of the site.

3. The annual plant survey conducted at the proposed project site notes that the onsite creosote bush scrub community " . . . is noticeably depauperate, in species, diversity and abundance. Several plant species that are normally common components of this community are not present" (Ecological Research Services, 1992c).

Response 034-46

1. It is agreed that desert habitats are not easily reclaimed. However, this is not the same as saying that disturbed habitat is permanently lost. As described in Chapter 3.0 of the Draft EIR/EIS, development of additional landfill cells and the closure of cells, including revegetation, would occur incrementally throughout the life of the proposed landfill. Therefore, the area of disturbance at any one time during the life of the project would be limited (i.e., a maximum of 360 acres during the initial construction period

and then approximately 50 to 200 acres annually in accordance with the phased development of landfill cells). The sequential development pattern would enable the majority of the dedicated acreage for the landfill footprint to remain undisturbed at any one time.

2. Closure/postclosure procedures, including revegetation, would be implemented following the capping of a closed cell. Thus, reclamation of the landfill would occur continually throughout the life of the facility, and during postclosure operations and monitoring.

3. See Response 034-34 for a discussion of the revised revegetation plan for the proposed landfill and a revised mitigation measure for revegetation.

Response 034-47

1. It is not agreed that no wildlife habitat values would exist until well past the closure of the landfill. As explained in Response 034-46, and Chapter 3.0 of the Draft EIR/EIS, the landfill would be developed sequentially. In this manner, closure would begin on completed areas of the landfill at the same time that a new area of the site was being prepared for use. In this manner, wildlife habitat values would gradually be restored while the landfill continues to operate.

Response 034-48

1. The statement that " . . . loss of 2,400 acres of habitat is not permanent because state regulations require implementation of reclamation activities through revegetation," is correct in that a closure/postclosure plan for the landfill would include a detailed plan for reestablishment of a desert plant community. Since the site would no longer be an outwash alluvium, the habitat would change. However, native desert plants characteristic of hilly side slopes would be used to revegetate portions of the closed cells. Reestablishment of a native desert plant community would begin with the closure of the first cell and continue to final closure of the last cell and through the postclosure monitoring and maintenance period.

Response 034-49

1. Based on an evaluation of the physical and biological characteristics of the proposed Bolo Station site as they pertain to the COE criteria for jurisdictional waters of the United States (33 CFR Part 328), LSA & Associates concluded that the proposed site does not include any areas that meet the criteria for waters of the United States (LSA, 1992).

2. It is not the intent of 33 CFR Part 328 to apply Section 404 of the Clean Water Act regarding United States jurisdiction to overland sheet flow areas. Rather, the regulations and its guidance emphasize the fundamental requirement that an area truly be a water body in order to be considered jurisdictional. None of the onsite drainage channels on the proposed Bolo Station site are continuous across the site; rather, the drainages alternate between channelized (including braided channel) and overland flow regimes. LSA differentiated between overland flow and water bodies based on guidance provided in 33 CFR Part 258, relying on the presence of an OHWM (that line on the shore established by the fluctuations of water, plus indicated physical characteristics such as a clear natural line impressed on the bank) to delineate channel areas from sheet flow areas. In all cases, the lack of a continuous OHWM between the surface drainage features of the proposed site and Bristol Dry Lake precluded these channels from being considered as tributaries of the playa.

3. Based on these findings, it was LSA's opinion that onsite surface drainage features were not tributaries to Bristol Dry Lake. Thus, the onsite drainage features do not meet the 33 CFR Part 258 criteria for jurisdictional waters of the United States. On March 19, 1992, the COE issued its determination that a Section 404 Permit would not be required for the proposed action. This letter was contained in Appendix E of the Draft EIR/EIS.

4. In addition to consultation with the COE regarding a Section 404 Permit, Rail•Cycle requested the concurrence of CDFG that a Section 1600 permit would not be required. By letter dated November 18, 1993, CDFG determined that a Section 1600 streambed alteration permit will not be required for the proposed action. A copy of the letter from CDFG is included as Appendix C of this Final EIR/EIS.

Response 034-50

1. It is believed that planned efforts for revegetation of the landfill site would result in overall impacts that are less than significant. See Response 034-34 for a discussion of a revised mitigation measure for revegetation of the proposed landfill included in this Final EIR/EIS.

Response 034-51

1. See Response 034-36.

Response 034-52

1. See Response 034-36, which addresses the concerns of potential effects of noise, light, and increased traffic.

2. As discussed in Section 5.6.1 of the Draft EIR/EIS, a study completed for the proposed Eagle Mountain Landfill concluded that, provided the animals were able to cross the tracks without becoming trapped, an increase in train traffic, with associated noise and vibration, would not adversely affect resident desert tortoises (BLM and County of Riverside, 1991). The study evaluated two sections of track in the Mojave Desert with known tortoise populations and found tortoise burrows located both near and within the roadbeds of active railroad lines.

Response 034-53

1. The impacts listed in Table 1.1 of the Draft EIR/EIS are equally applicable to the proposed action and alternatives listed.

Response 034-54

1. While this comment does not alter the findings or conclusions of the EIR/EIS, Tables G.4, G.5, and G.6 of the Draft EIR/EIS have been revised to clarify the species observed and those expected at the Bolo Station site. The revised tables are included in Chapter 1.0 of this Final EIR/EIS.

Response 034-55

1. The AQIA was provided to agencies and individuals that requested copies. See Response 034-29 regarding the availability for public review of the various technical reports utilized for analysis in the Draft EIR/EIS.

Response 034-56

1. It is not appropriate to compare air quality impacts and mitigation measures for this proposed project, as this type of comparison is not relevant or warranted under CEQA or NEPA. Rail•Cycle and Eagle Mountain are separate projects having unique considerations including operational constraints, equipment usage (i.e., different railroad companies committing to varying locomotive fleets), and terrain considerations (i.e., flat versus complex terrain). Rail•Cycle is not required to compare analyses and estimated impacts with Eagle Mountain, because Eagle Mountain is not considered an alternative to Rail•Cycle. Rather, Rail•Cycle and Eagle Mountain are similar projects that are independent of each other and could both be implemented.

2. Based on comments on the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement included refinement and reevaluation of the impacts and mitigation.

Response 034-57

1. See Response 034-56.

Response 034-58

1. See Response 034-56.

Response 034-59

1. This comment suggested potential mitigation measures for inclusion in the proposed Rail•Cycle project. In response to this, and other comments, in May 1993, Rail•Cycle submitted to the MDAQMD a document entitled *Rail•Cycle Bolo Station Landfill Supplemental Air Quality Analysis* (Rail•Cycle, 1993a). The conclusion and findings of this analysis were summarized in Section 5.4 of the Supplement. Based on this analysis, it was determined that even with the implementation of the mitigation measures in the Draft EIR/EIS and additional mitigation measures included in the Supplement, air quality impacts in the SEDAB would still be significant after mitigation, and will require a statement of overriding consideration.

Response 034-60

1. Final determination of the appropriate base slope of the landfill is a detailed design issue to be established during the proposed action's final design. The percent of base slope must be approved by the SBCDEHS, acting as the LEA, the CIWMB and the RWQCB as part of the permitting process for the proposed landfill. The final base slope would be established based on site-specific considerations relative to potential landfill liquids generation, settlement, and other factors. The final slope would be adequate to provide proper drainages to leachate collection sumps to be established along the north and south perimeters of the landfill.

Response 034-61

1. As discussed in Section 3.0 of the Supplement, drainage structures throughout the proposed Bolo Station Landfill would be designed to accommodate flows from a 100-year, 24-hour, rather than the 25-year, 24-hour storm specified for certain drainage features cited in the Draft EIR/EIS. A mitigation measure was

included in Section 5.2 of the Supplement requiring that stormwater run-on and runoff control structures be designed, constructed, and maintained for the 100-year, 24-hour storm.

Response 034-62

1. The potential for surface water to come in contact with solid waste would be minimized by the proposed landfill's surface drainage system, which would be designed to preclude such occurrence. Sections 3.3.2.1.4, 5.4.1.1.1, and 5.4.5.1 of the Draft EIR/EIS described surface water drainage controls that would be implemented to channel and direct stormwater flows.

2. Surface water that comes into contact with solid waste would be handled as leachate. The volume of such water would be minimized by the application of daily and intermediate cover and by diversion berms and ditches designed to handle flows from a 100-year, 24-hour storm event. The drainage layer and leachate collection systems also would be designed and sized for a 100-year, 24-hour storm event. Details of final design and performance analysis are contained in the ROWD and RDSI that are part of the permit application for the WDRs and SWFP, respectively.

3. See Response 034-61 regarding the inclusion of a mitigation measure in the Supplement for the 100-year, 24-hour storm.

Response 034-63

1. Section 5.4.5.1 of the Draft EIR/EIS referenced a technical report that outlines the design and operational features of the landfill that would prevent and mitigate ground water contamination (Rail•Cycle, 1992a). This report, *Design and Operational Features for Prevention of Groundwater Contamination*, presented quantitative estimates of leachate generation that were developed using the COE's HELP hydrologic model.

2. Surface water that comes into contact with solid waste would be handled as leachate. The volume of such water would be minimized by the application of daily and intermediate cover and by diversion berms and ditches designed to handle flows from a 100-year, 24-hour storm event. The drainage layer and leachate collection systems also would be designed and sized for a 100-year, 24-hour storm event. Details of final design and performance analysis are contained in the ROWD and RDSI that are part of the permit application for the WDRs and SWFP, respectively. The following information summarizes the findings of HELP model:

   - Open Module (protective cover; no waste): Peak daily drainage 76 gallons/acre (3,800 gallons/50-acre module per day).
   - Interim Module (50 percent filled; waste 150 feet deep): Peak daily drainage 2.7 gallons; Average annual drainage: 595 gallons/acre
   - Closed Module (100 percent filled; final cover and cap installed): No leachate generated.

3. Final design calculations that demonstrate the adequacy of the leachate collection system to collect and contain these flows are included in the ROWD and RDSI to be submitted as part of the permit application for the WDRs and SWFP, respectively.

Response 034-64

1. Section 3.3.3.3 of the Draft EIR/EIS described the intent of Rail•Cycle to establish ground water monitoring wells and monitor constituents utilizing upgradient background monitoring wells, in conformance with CCR Title 23. Section 5.2 of the Supplement described a refined program for ground water monitoring for the proposed action. The proposed location of the wells was shown on Figure 5.2.2 of the Supplement, although the specific locations would be determined at the time of installation in consultation with RWQCB.

Response 034-65

1. The final design for the Rail•Cycle proposed alternative liner system includes a UZM (vadose) system that would detect both liquid and gaseous releases, should they occur, from the overlying liner system (see Sections 3.2.4.1 and 5.2 of the Supplement).

CADIZ
LAND COMPANY, INC.

10470 Foothill Boulevard, Suite 116
Rancho Cucamonga, CA 91730
(909) 980-2738
FAX (909) 980-4134

VIA HAND DELIVERY

March 1, 1993

Mr. Randy Scott, Senior Planner
Mountain-South Desert Planning Team
Land Management Department, Office of Planning
County of San Bernardino
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, California 92415-0182

Mr. Doug Romoli
Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, California 92507-0714

Re: Rail•Cycle-Bolo Station Landfill Draft EIR/EIS

Dear Mr. Scott and Mr. Romoli:

Cadiz Land Company, Inc. ("CLCI") submits the following comments on the draft Environmental Impact Report/Environmental Impact Statement ("EIR/EIS") for the Rail•Cycle-Bolo Station Landfill (November 1992 draft). We want to make clear at the outset that we believe the proposed Rail•Cycle project to be incompatible with our neighboring land use -- growing high quality produce. We further believe the proposed project should be sited elsewhere or not approved at all. However, in order to comply with the CEQA and NEPA procedures for public comment, we have provided comments on the EIR/EIS below. ①

I.

INTRODUCTION

CLCI[1] owns approximately 26,000 acres of land in the Cadiz Valley. The western boundary of our land is located only one mile from the proposed Bolo Station landfill. Of this 26,000 acres, we have planted 800 acres with table grapes and 640 acres with selected varieties of desert citrus. We are continuing to expand our operation. Our proposed expansion will likely total more than $50 million in investments and will allow us to create many new jobs in addition to the hundreds we provide currently.

Due to our proximity to the proposed dump, we are extremely concerned about its environmental impacts. The high quality water supply and clean air of the Cadiz Valley have enabled us to produce superior quality grapes and citrus for the past eight years during periods of peak off-season demand. Preserving the quality of this unique desert environment is critical to our reputation and growing process. We undertake considerable effort to protect this environment by routinely disinfecting all farming equipment coming into the site and by using a minimal amount of pesticides. In fact, we are currently in the process of obtaining organic certification for our produce. Such certification depends not only on the quality of resources on our site, but also on the quality of the surrounding environment. Due to our attention to quality, our produce is recognized as superior throughout the agricultural industry.

Because we grow produce for human consumption, maintaining our reputation for quality is of primary importance. Putting a "mega landfill" next door to our premium agricultural operation will not only impact our crops, but will impact the marketability of our produce. In the food industry, perception is as important as reality. The mere perception that our produce has been tainted could easily cost us our market. The proposed Rail•Cycle project is simply incompatible with the production of high quality specialty produce intended for human consumption. ②

Although our farming operation has been in existence since 1985 and is well known to County staff, no one from the County, BLM or Rail•Cycle has ever approached CLCI to discuss in any detail the impacts of this project on our operation. ③

---

[1] CLCI is incorrectly identified in the EIR/EIS as "Pacific Agricultural Holdings, Inc." The correct name of the company is "Cadiz Land Company, Inc."

As a result, the draft EIR/EIS contains inaccurate and misleading data and fails to address the impacts of this enormous dump on CLCI's current and future operations. This disregard for an important and viable business is inexcusable. In fact, the EIR/EIS fails to identify the extent of CLCI's land holdings. To rectify this omission, we have attached as Figure 1 a map showing the location of our land in relation to the proposed Bolo Station landfill. We request that this information be incorporated into the EIR/EIS. ③ CONT.

Please note that the proposed Cadiz Valley alternative site (also shown on Figure 1) actually incorporates one section (640 acres) of our land. We find it astonishing that Rail•Cycle has incorporated our property into its proposed alternative without notifying us. If it is by mistake, we are led to wonder what other inaccuracies exist in the EIR/EIS. ④

Given the overwhelming magnitude and longevity of this proposed project, the EIR/EIS should provide full and fair disclosure of all potential environmental impacts and should be able to withstand the highest level of scrutiny by all involved public agencies and the public. However, as set forth below, the EIR/EIS violates both the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"). Among other things, the EIR/EIS fails to provide the agencies and public with all information necessary to evaluate the environmental impacts associated with the project, fails to identify all significant impacts, fails to provide adequate mitigation for the significant impacts of this project and fails to address feasible alternatives to the project.

Although our comments are directed specifically to the proposed Bolo Station site, they are also applicable to the proposed alternative sites. Our principal objections are set forth below.

II.

THE EIR FAILS TO ANALYZE PROJECT IMPACTS

CEQA and NEPA require an EIS or EIR to disclose the impacts of a proposed action and to provide a sufficient degree of analysis and technical information to allow full assessment of a project's impacts by reviewing agencies and the public. (State CEQA Guidelines §§ 15151, 15147; Silva v. Lynn (1st Cir. 1973) 482 F.2d 1282; Sierra Club v. Morton (5th Cir. 1975) 510 F.2d 813.)

The EIR/EIS for the proposed Bolo Station landfill violates these legal standards by failing to characterize the project's impacts accurately and by failing to identify many of the project's significant impacts. These omissions are particularly evident for seismic, groundwater, flood and erosion, public health and safety, air quality, and noise and transportation impacts.

The EIR/EIS also violates CEQA and NEPA by deferring an analysis of the MRFs. MRFs are an integral, in fact, in separable part of the project. This constitutes impermissible project-splitting. To the extent information is available, an analysis of the MRFs should be made. ⑤

A. Seismic Risks

1. Seismic risks are not described accurately.

The EIR/EIS (p. 4.2-11) provides the following definitions:

> According to the California Public Resources Code, an "active fault" is one that has had surface displacement within Holocene time (approximately the last 10,000 years). A "potentially active fault" is defined as one that has shown evidence of surface displacement during the Quaternary period (the last two million years). Inactive faults are those which have not shown surface displacement within the Quaternary period.

In evaluating the seismic risks associated with the proposed project, the EIR/EIS claims that "no active or potentially active faults have been mapped within 20 ⑥ miles of the [project] site, and none project toward or through the landfill site".[2] (EIR/EIS, p. 4.2-21.) Section 4.2.1.4.1 "Capable Faults in the Region" on p. 4.2.11 (¶ 1) states that "the closest active fault is the Pisgah-Bullion Fault, approximately 29 miles southwest of the Bolo Station site and 35 miles southwest of the Cadiz Valley Alternative site. The nearest potentially active fault is the Ludlow Fault, approximately 15 miles northwest of the Bolo Station site and 26 miles northwest of the Cadiz Valley Alternative site."

These statements, together with Figure 4.2.3 depicting "Faults within the Project Region" and Figure 5.2.1 "Location of Recent Seismic Activity," are inaccurate and misleading. In fact, over 75 independent sources contradict these conclusions. (See Appendices A-K attached.) We have attached as Figure 2 a map showing the generalized traces of eleven fault zones which show evidence of Quaternary movement, located within twenty miles (32 km) of the proposed Bolo Station site. In accordance with the definitions in the Public Resources Code cited above, these fault zones are considered either active or potentially active. Because of scale limitations, Figure 2 is not detailed. We refer the County and BLM to the descriptions and references cited in Appendices A through K for evidence regarding the locations, ages, and displacements of these fault zones. ⑥ CONT.

As shown in Figure 2, several Quaternary fault zones may directly underlie the proposed Bolo Station site and the proposed Cadiz Valley alternative site. We believe that both of these sites have major risk of ground failure during a seismic event, either by direct displacement or by liquefaction of the underlying sediments. Such ground failure could result in massive surface and groundwater pollution.

Furthermore, the fault zones shown on Figure 2 and described in Appendices A through K are considered members of the "Eastern California Shear Zone". This regional tectonic feature consists of several dozen structures which form a mechanically linked system of major right lateral slip. The Landers earthquake of June 28, 1992 (which measured M7.5 + on the Richter scale) occurred on a western member of this system that had not generally been considered "active". This earthquake resulted in surface ruptures on several adjacent members of the Eastern California Shear Zone. All of this information has either been overlooked, misinterpreted or misrepresented in the EIR/EIS. ⑦

---

[2] The EIR/EIS also claims that no active or potentially active faults have been mapped within 15 miles of the proposed Cadiz Valley alternative site (p. 4.2-25).

Based on the above sources, we believe that the proposed project will not comply with state and federal seismic regulations governing the siting of landfills. These regulations require, among other things, that a Class III landfill be designed to withstand a maximum probable earthquake. (Cal. Code Regs., Title 23, § 2547.) Under state law, a Class III landfill cannot be located on a Holocene fault (id. at § 2533) and under federal law, a new solid waste facility may not be located within 200 feet of a Holocene fault. (40 C.F.R. § 258.13). Federal law also requires that a solid waste facility be designed to resist the maximum horizontal acceleration expected from a seismic event. A demonstration must be made that the landfill is not located in an "unstable" area. (40 C.F.R. §§ 258.13, 258.14, 258.15.) ⑧

In its discussion of historic earthquake activity in proximity to the proposed Bolo Station and Cadiz Valley alternative sites, the EIR/EIS (p. 4.2-13, ¶ 2) fails to identify numerous recent earthquakes (1978-1992) which have been identified in S. K. Groter, 1992, U.S. Geological Survey Open-file report 92-533. ⑨

The EIR/EIS concedes that its assessment of seismic risks is incomplete by stating that the RWQCB is requiring further verification of the lack of active faults and that Rail•Cycle is implementing a "supplemental site verification study." (EIR/EIS, p. 5.2.-1.) However, until such information is known, it is impossible for the public and decisionmakers to assess the seismic risks of this project as mandated by CEQA and NEPA. ⑩

Deferring a complete analysis to a "site verification study" violates CEQA's requirements that project impacts be identified before project momentum reduces or eliminates the agency's flexibility. (Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296.) Since seismic risks are significant, CEQA requires that the public have an opportunity to review the study. ⑪

Therefore, we request that the draft EIR/EIS be withdrawn until this study is complete and the County and BLM have reviewed the information we have provided above. The draft EIR/EIS must then be revised and recirculated to reflect this information and to assess whether federal and state siting requirements can be met. ⑫

2. All seismic impacts are not included.

Since the EIR/EIS has failed to analyze the true seismic risks associated with this proposed project, its conclusion that seismic impacts are mitigable (EIR/EIS, p. 5.2-13) is unsupported. In fact, based on our review of expert sources, the seismic risks appear considerable. While Rail•Cycle proposes a double liner system, we believe that in a major seismic event, seismic risks would be unmitigable. ⑬

The EIR/EIS must be revised to provide an accurate and informed evaluation of the seismic risks of the proposed project. Such risks include liner breakage, liquefaction and massive surface and groundwater contamination. Specific impacts to CLCI (identified below under "Groundwater") must be evaluated and mitigation measures adopted. ⑭

B. Groundwater

1. The groundwater data in the EIR/EIS is incomplete.

CLCI has over eight years of experience operating high-yield irrigation wells in Cadiz Valley. We have also developed extensive data regarding groundwater recharge and storage in the area. The groundwater in the area is of the highest quality. None of this information is presented in the EIR/EIS. Also, no one has ever asked us for this information. In fact, EIR/EIS Sections 4.4.2 & 5.4.1.2.1 present estimates of groundwater recharge to Cadiz Valley that are absurdly inadequate.

The EIR/EIS Section 4.4.2.1 cites Freiwald (1984) for an estimate of recharge to the Cadiz Valley from Fenner Valley at 270 acre-feet/year. This reconnaissance study by the U.S. Geological Survey involved no exploratory drilling, well testing, or geophysical surveys, and predated the drilling and testing of our company's three exploratory wells and five irrigation wells. Table 1, attached, presents basic hydrological data for CLCI's wells. Please note that the "measured" transmissivities for these wells are as much as two orders of magnitude (100 x) greater than those "assumed" by Freiwald for Fenner Valley. ⑮

CLCI's estimates of groundwater recharge through Fenner Wash are based on a Darcy's Law model of groundwater flow, utilizing proprietary gravity and magnetic data for estimating the saturated cross-sectional area of Fenner Gap, together with the measured water table gradient in the gap, and an estimated transmissivity based on our irrigation wells. This model indicates recharge at approximately 20,000 acre-feet/year, with an estimated accuracy of plus/minus 25%.

This estimate of recharge is supported by CLCI's pumping history. Since 1986, we have pumped over 30,000 acre-feet of groundwater. Well #27S (the closest to Fenner Gap) pumped over 1,300 acre-feet during 1992, and ended the year with a static water level 34 feet higher than when it was originally drilled and tested in 1989. The remaining four production wells finished 1992 with static water levels at or near their original levels. ⑮ CONT.

Based on the above evidence, we conclude that the estimates of "safe yield" presented in EIR/EIS Section 4.4.2.1.4 "Ground Water Usage" are without scientific merit. As a result of relying on inaccurate and misleading data, the EIR/EIS also claims incorrectly that the Bristol Basin is in "overdraft." (EIR/EIS, pp. 4.4-1, 4.4-2, 4.4-14, 4.4-22, 4.4-27, 5.4-3.) We request that the EIR/EIS be revised to characterize more accurately the recharge in this area.

Figure 4.4.6 "Ground Water Contours and Flow Direction in the Region" depicts a groundwater "divide" separating the proposed Bolo Station site from the fresh water recharge of Orange Blossom Wash. However, no scientific evidence is presented for this "divide". EIR/EIS Section 4.4.2.2 "Local Site Ground Water" describes geophysical evidence for a "bedrock ridge" underlying this portion of the site at a depth of "about 500 to 1,000 feet below the surface". This bedrock ridge, if it exists, is far too deep to constitute a groundwater "divide," since the maximum depth to groundwater is stated to be less than 200 feet. ⑯

EIR/EIS Figures 4.4.10 "Estimated Natural Ground Water Contours" and 4.4.11 "Existing vs. Historic Fresh Water - Brackish Water Interface" and Table 4.4.5 indicate that the proposed Bolo Station site overlies fresh water at depths as shallow as 50 feet. We believe that locating a landfill directly over a fresh water aquifer is environmentally irresponsible. This objection applies to both the proposed Bolo Station and Cadiz Valley alternative sites. The groundwater in the Bristol and Cadiz basins is currently being put to domestic, agricultural and industrial uses. As the County is no doubt aware, a Class III landfill must be sited to ensure no impairment of beneficial uses of groundwater and must evaluate current and anticipated uses of groundwater. (Cal. Code Regs., title 23, § 2533.) The EIR/EIS must explain how the proposed project will meet this criteria. ⑰

In addition, it is difficult to determine the level of potential groundwater impacts since the EIR/EIS fails to describe how hazardous wastes will be separated from non-hazardous wastes in the waste stream coming to Bolo Station. More detail on this is needed. We are particularly concerned about this issue in the event of liner failure which would allow hazardous wastes to leak directly into the groundwater. ⑱

2. Impacts to CLCI are not identified.

The EIR/EIS refers casually to impacts which would be devastating for CLCI. For example, the EIR/EIS admits that the liner has only been tested in landfills for a ten year span and "the performance for 50 to 100 years has not been evaluated." (EIR/EIS, p. 5.4-4.) The basis for extrapolating a reliable, longer lifetime from this limited data is unexplained. The EIR/EIS also concedes that failure of the gas collection system could allow landfill gases to migrate offsite, which would impact adjacent land users and groundwater quality. (Id. at 5.4-5.) Noticeably absent from the analysis is a meaningful discussion of these impacts on CLCI's agricultural operation. ⑲

This inadequacy may stem in part from the cursory treatment CLCI receives in the "Affected Environment" section of the EIR/EIS (Chapter 4). CEQA requires that an EIR include "a description of the environment in the vicinity of the project, as it exists before the . . . project, from both a local and regional perspective . . . . Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project." (State CEQA Guidelines § 15125.) NEPA requires an EIS to describe the environment of the area to be affected. (40 C.F.R. § 1502.15.) While CLCI is mentioned in the EIR/EIS, the impacts of the project upon its agricultural operation -- part of the "affected environment" -- are not evaluated in any meaningful fashion. ⑳

The EIR/EIS must be revised to reflect the impacts that poor groundwater quality will have on our project. Such impacts include: ㉑

- increased susceptibility of our workers and crops to disease;
- death or mutation of our crops from absorption of contaminants;
- alteration of flavor or color of fruit;
- smaller fruit size;

- reduced yield;
- contamination of our citrus and grapes, creating a health risk to our consumers and to our workers who handle the fruit; ㉑ CONT.
- exposure of our workers to contaminated water.

Mitigation measures to prevent or reduce these impacts must be identified and implemented as conditions of approval for this project.

Also, the EIR/EIS must be revised to address the possibility of aquifer compaction from the sheer weight of the trash to be placed on this site. Consolidation of the soft soils below the dump could act as an obstacle to groundwater flow, adversely affecting the fresh water recharge to our site. Such compaction could interfere with our reasonable and beneficial use of water as recognized under California water law. The act of obstructing our water flow may also be an unreasonable and wasteful use of water by Rail•Cycle in violation of Article X, Section 2 of the California Constitution. The EIR/EIS must address this impact and identify mitigation for it. ㉒

C. Flood and Erosion Risks

1. Flood and erosion risks are not described accurately.

The EIR/EIS' depiction of surface geology at the Bolo Station site is inaccurate and misleading. (EIR/EIS, sections 4.4 and 5.4 and Figure 4.2.5.) The proposed Bolo Station site lies directly on an active (Holocene) portion of the Orange Blossom Wash drainage system. This drainage system has a recharge (catchment) area of approximately 130 square miles and topographic relief of over 6,000 feet. ㉓

In addition, portions of the proposed Cadiz Valley alternative site lie directly on an active portion of the Fenner Wash drainage system. This drainage system has a recharge area of approximately 1,140 square miles and topographic relief of nearly 7,000 feet. We request that this information be included in the EIR/EIS and the significant environmental impacts be described, especially those that affect CLCI. ㉔

2. Impacts to CLCI are not identified.

The EIR/EIS fails to identify the methods and parameters used to estimate the magnitude of a 100-year precipitation/flood event. We request that the County and BLM provide this information as we are concerned that the EIR/EIS has significantly underestimated these risks. Accordingly, we are doubtful that the mitigation measures proposed in Section 5.4.5.1 would be adequate to mitigate for flooding and erosion impacts to CLCI's site during a major precipitation event. Such impacts include:

- spreading trash, contaminated soil and/or leachate. Such events would create odors and attract disease vectors to our site, thereby exposing our workers to disease and our crops to attack from pests and ravens; ㉕
- erosion and ponding on the surface of the landfill which would create odor and attract vectors to the landfill and to our site;
- massive erosion of the landfill causing widespread surface and groundwater pollution. (For the effects of poor water quality on our crops, please see the discussion above under "Groundwater".)
- alteration of drainage patterns, leading to flooding of our site (which could harm our workers and harm or kill our crops).

The EIR/EIS must be revised to analyze these impacts and identify feasible mitigation measures which will be made conditions of project approval.

D. Public Health and Safety

The EIR/EIS fails to provide substantial evidence to support its conclusion that the project will have no significant impacts on public health and safety. (Id. at 5.8-5.) The legal standard is strict for disease vectors: Owners or operators of landfills must prevent or control disease vectors. (40 C.F.R. § 258.22.) One of the most important marketing advantages of CLCI's Cadiz Valley site is that it is currently free of traditional agricultural pests. CLCI goes to considerable effort and expense to protect this unique advantage by disinfecting all equipment brought into the Cadiz Valley from other agricultural areas and by using minimal pesticides. The impacts from disease vectors acknowledged in the EIR/EIS could have a major impact on the marketability of our produce. ㉖ ㉖ CONT.

As stated above, we grow produce for human consumption. We cannot sell our produce if it is contaminated (or perceived to be contaminated) in any way. The following impacts to our site need to be addressed and mitigation measures identified:

- Placing a dump in this area would introduce rodents, seagulls, ravens, flies and other undesirable disease vectors to an area where they do not currently exist in any significant amount. Rodents and vermin do not respect property lines. Our minimal use of pesticides makes us especially vulnerable to pests. Mediterranean fruit flies and poinsettia white flies may be transported to the landfill in trash and end up on our site. The EIR/EIS needs to identify how it will protect our site from these vectors. ㉗
- Our site and that of the proposed dump are located in a high wind area. Even with enclosed structures, there will be trash and other debris strewn about the area. Like vermin, wind blown trash does not respect property lines. The County and BLM should have conducted a wind study to ascertain these impacts. Increased vermin and trash near our site will attract ravens. Ravens can eat our crops or otherwise destroy them. How do the County and BLM propose to protect our site from these impacts? ㉘
- We are concerned about the introduction of hazardous waste materials at the dump. Even residential household garbage contains hazardous waste, which, when inadvertently mixed together in the garbage stream, can be dangerous. During a workshop held before the RWQCB, spokesmen for Rail•Cycle could not guarantee that hazardous waste would not end up in this proposed dump. Furthermore, the mere presence of tons of garbage presents an unacceptable increase in risk of fire which could easily spread from the dump to surrounding properties. The EIR/EIS needs to evaluate the impacts to our crops and workers hazardous waste would pose. These impacts include: ㉙

☐ health impacts to our workers (from handling contaminated fruit and breathing contaminated air);

☐ contamination of fruit (from airborne and waterborne hazardous wastes); ㉚

☐ death or mutation of crops.

- The EIR/EIS needs to evaluate the impacts of transporting the trash in steel containers along a very hot desert corridor. The public health and safety impacts from "cooked" trash must be addressed. We presume that the steel containers will need to be vented in some way. The air quality and odor impacts from such venting along the railroad route need to be addressed. If no venting will be done, the risk of explosion or fire from the "cooked trash" (the possible equivalent of a bomb) must be addressed. ㉛

- The EIR/EIS must identify the impacts of noise and vibrations from the landfill (from truck and rail traffic and landfill operations) on our workers. Permanent workers live on our site now and many more will live there after our expansion. In addition, we have many seasonal workers on the site at various times throughout the year. Our workers work long hours during the day and it is imperative to their health and productivity that they get a quiet night's rest. The EIR/EIS fails to discuss the impacts of nighttime train traffic on our workers, including sleep interruption and impact on their general quality of life. ㉜

- The impact of odors on our workers (headaches, nausea) also needs to be addressed. ㉝

The health and safety of our workers is very important to us. If our workers are tired or ill, they put themselves and others at risk of increased accidents during the work day. Moreover, impacting the health and safety of our workers will affect our ability to attract and keep personnel on our project site.

E. Air Quality.

The EIR/EIS states that there will be no significant air quality impacts on CLCI's vegetation because state and federal standards will not be exceeded. (EIR/EIS, p. 5.7-15.) While CEQA allows an agency to presume that an air quality impact is not significant if it meets existing standards (State CEQA Guidelines § 15064), if "other information" is presented that suggests an emission may cause a significant impact, the lead agency must evaluate that impact. (Id.) In this case, the EIR/EIS does not evaluate whether wind storms (a likely event in this area) or fires at the project site could exacerbate these impacts and raise them to a level of significance. A wind study should be conducted to ascertain these impacts. Poor air quality can have tremendous effects on CLCI's crops. These effects include crop death or mutation, smaller yield and smaller fruit size. Also, excess dust can interfere with pollination. ㉞

The EIR/EIS must also address the impacts that poor air quality can have on our many permanent and seasonal workers, including emissions from the landfill itself and from the additional traffic it will create. The EIR/EIS fails to identify this important population. These people will be living and working close to the proposed dump. The EIR/EIS should evaluate the adverse impacts to the workers we employ now and to the many more we plan to hire when we expand our operations to 9,600 acres. Appropriate mitigation must also be identified. ㉟

The EIR states that a "daily cover" will be used to reduce odors. (EIR/EIS, p. 5.7-21.) This cover may consist of soil. (Id. at 3-31.) The EIR/EIS should explain how the County and BLM plan to mitigate any dust impacts which could result from wind blowing over this soil cover. ㊱

The EIR/EIS must provide a better evaluation of how fire impacts will be mitigated. Concerns about the County's ability to provide fire protection for the site were expressed at the hearings held by the BLM for this project. In fact, at least one agency which was identified in the EIR/EIS as providing fire protection asked to be removed from the EIR/EIS. Fire could wipe out our crops, and if hazardous or toxic materials are present, our workers could be exposed to toxic fumes and carcinogens. ㊲

G. Transportation/Noise

One of the criteria set forth in the EIR/EIS for measuring whether a traffic impact is significant is a "significant increase in delay time at railroad/vehicle grade crossings." (EIR/EIS at 5.12-1.) At project build-out, the EIR/EIS estimates vehicle ㊳ delays of 8 percent to 192 percent, depending on the area. (Id. at 5.12-4-5.) However, the EIR/EIS claims that there will be no significant traffic impacts as a result of the project. (Id. at 5.12-8.) The EIR/EIS needs to explain why, in the face of these significant delays, it concludes there will be no significant transportation impacts. The EIR/EIS should also explain what threshold of traffic delays it is using to define "significant." ㊳ CONT.

The following impacts must be addressed:

- Where does the project proponent plan to turn its trains around (both at the proposed and alternative site) and how will this affect our operations (i.e., accessibility to and from our site)? Since freshness is of great concern to us, we must be able to transport our fruit to our markets freely. ㊴
- The EIR/EIS should include the impacts from a train derailment or accident near our site. Such impacts are likely; a train derailment occurred at our site on September 3, 1992. ㊵
- In its noise analysis, the EIR/EIS fails to evaluate whether the use of "noise devices" to control ravens (EIR/EIS, p. 3-45) will create adverse significant impacts, especially to our workers. ㊶
- The EIR/EIS fails to include an analysis of the noise from truck traffic (tipping at the site and transportation to the railyards) and rail traffic and how this noise will affect our workers during the day and while they sleep at night. ㊷

H. Land Use.

1. General Plan

The EIR/EIS' statement that the dump "would not conflict with the current or reasonably foreseeable land use of adjacent properties" is simply untrue. (EIR/EIS, p. 5.14-3.) Under no circumstances can a "mega landfill" such as that proposed by Rail•Cycle be compatible with our land use -- the production of high quality fruits for human consumption. As discussed above, perception in the agricultural industry is just as important as reality. Placing a dump next to our site will ㊸

not only impact our crops, but will severely impact the marketability of our products. The EIR/EIS must address these impacts. ㊸ CONT.

Moreover, policies in the County's General Plan discourage land uses that will adversely impact agriculture. (See, e.g., General Plan, pp. II-C-51, II-C-53, II-C-55.)

The EIR/EIS is vague as to the General Plan amendment that will be required, stating merely that a "more intense" use classification is required. (EIR/EIS, p. 5.14-4.) None of the County's land use designations seem to include a landfill like this. What land use classification will be used? ㊹

2. CoSWMP and CoIWMP

The EIR/EIS claims that AB 2296 provides the County with authority to approve this landfill. (EIR/EIS, p. 4.14-3.) According to the EIR/EIS, AB 2296 allows approval of new facilities that were included in the most recently approved CoSWMP or those that were approved "by the local jurisdiction" to proceed prior to completion of a CoIWMP.

As the EIR/EIS notes, the CoSWMP that was last "approved" by the County does not include the present proposal. The local jurisdiction (the County) has not "approved" this facility. A landfill in the Amboy area is allegedly "referenced" in the County's 1989 revised draft CoSWMP. However, this document was never approved. The EIR/EIS needs to clarify its statements on page 4.14-3 and explain how a draft CoSWMP that was never "approved" can serve as a basis for approving this project. ㊺

We are unable to comment on the consistency of the project with the draft CoSWMP or draft CoIWMP since neither has been made available in the EIR/EIS. We have also been unable to obtain these plans from the County. Since these documents are the key to determining the project's impacts on land use, they must be made available so that full disclosure of all land use impacts can be made under CEQA and NEPA. The EIR/EIS should also explain how a mere "reference" to a proposed landfill is sufficient to meet the requirements of AB 2296.

III.

THE MITIGATION MEASURES DESCRIBED IN THE EIR/EIS ARE INADEQUATE

Since the EIR/EIS has failed to address the impacts of the proposed dump on CLCI, it has failed to identify mitigation measures to reduce those impacts. We request that at the least, mitigation measures for the impacts identified above be added to the EIR/EIS. However, as stated above, we believe the proposed project is incompatible under any circumstances with ours.

Several of the mitigation measures provided in the EIR/EIS are inadequate under NEPA and CEQA because they are vague, of unknown efficacy, or not yet developed. (Sundstrom v. County of Mendocino (1988) 202 Cal.App. 3d 296; Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App. 3d 692; 40 C.F.R. § 1508.20.) They include: development of a post-earthquake inspection plan, development of a monitoring plan to evaluate whether the leachate and gas collection systems are operating efficiently (EIR/EIS, pp. 1-10, 5.4-8), development of plans to determine wildlife mitigation (not yet approved by BLM) (p. 5.6-5), and development of procedures to prevent illegal dumping and to minimize the presence of litter. (P. 5.9-13). In order to comply with CEQA, these plans and procedures should be developed and included in the draft EIR/EIS so that the public and decisionmakers can evaluate their feasibility and efficacy. In the absence of a commitment to follow any mitigation measures recommended in these future studies, deferring the development of these mitigation measures is improper. ㊻

Development of procedures to prevent illegal dumping and minimize litter are of utmost concern to us due to our proximity to the proposed dump site. The attached pictures taken 300 yards to one mile from the Mid-Valley dump operated by the County near Fontana show these problems were not mitigated there. We would like to know how the County proposes to improve its enforcement procedures at a dump far larger than the one pictured. We request that the County demonstrate adequate funding (e.g., through a bond) for these and all mitigation measures. We also request that mitigation measures for litter clean-up at our site be addressed. ㊼

Post-closure monitoring -- action that will take place long after the project proponents have moved on -- is similarly vague. The EIR/EIS states that a "plan" will be developed at some future time. (EIR/EIS, p. 3-62.) We urge the County and BLM to require that such a plan be developed now so that the public and all relevant agencies can review its terms before the project is approved. ㊽

A critical component of an EIR under CEQA is the "mitigation monitoring or reporting program." (Pub. Resources Code § 21081.6.) Because of the magnitude of this project and the importance of its mitigation measures, this plan should have been developed and circulated for review along with the draft EIR. While circulation of a draft monitoring plan is not required, early preparation and circulation of the plan provides the public and lead agencies with an overall view of how the mitigation measures will be implemented. For this project, it is critical to see how each mitigation measure will be enforced and funded. We request that this plan be circulated immediately. ㊾

Moreover, it is crucial to see who will be responsible for monitoring the mitigation measures. It is no secret that Waste Management, Inc. has a history of poor environmental compliance as documented in a lengthy March 1992 report by the San Diego District Attorney's office. This report documents, among other violations, a score of environmental violations. According to this report, at least 45 Waste Management, Inc. owned or operated waste sites have been found out of compliance with federal and state environmental laws and at least five sites have been ordered closed by regulatory agencies. Clearly, Waste Management, Inc. should not be permitted to monitor its own actions. ㊿

The EIR/EIS must also describe more specifically the Rail•Cycle partnership in order to assess whether environmentally responsible parties will be taking the lead on designing, implementing and monitoring the proposed landfill. The EIR/EIS states only that Rail-Cycle is a "50-50 partnership" between the railroad and Waste Management, Inc. (51)

IV.

THE EIR/EIS FAILS TO ANALYZE CUMULATIVE IMPACTS ADEQUATELY

Cumulative impacts analyses have been held inadequate when they understate the severity of impacts, omit information that should reasonably have been included and when they have not covered a reasonable geographic scope. (Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692; NEPA: Akers v. Resor (W.D. Tenn) (1978) 443 F.Supp. 1355.) The Rail•Cycle EIR/EIS fails on all counts.

The EIR/EIS includes CLCI's expansion as one of the projects contributing to cumulative impacts, but fails to discuss the impact of the Bolo Station landfill, along with the impacts of the many other landfills, mines, and hazardous and low-level radio-active waste sites proposed in the region, on CLCI's operations. Since CLCI is part of the affected environment, impacts to it should be disclosed. These impacts include:

- Potential leakage from all landfills into groundwater (leading to crop death or mutation, smaller fruit size, contamination of fruit). (52)

  The EIR/EIS states in one sentence that there will be no significant geological cumulative impacts. (Id. at 6-5.) No explanation for this statement is provided. This lack of support is particularly egregious in light of the fact that the analysis of seismic risks is deficient. (See comments above.) (53) The EIR/EIS fails to disclose whether any of the neighboring waste facilities will be subject to seismic risks and whether related faults could lead to leakage from one or all of them during a major earthquake. (54) With regard to groundwater quality, the EIR/EIS merely states that CLCI, America Mine and Leslie Salt "have the potential" to contaminate groundwater. (EIR/EIS, p. 6-6.) (55)

- Flood and erosion risks from all landfills to CLCI (trash washed to our site, flooding and siltation of our crops). (56)

- Air quality risks (leading to crop death or interference with pollination, harm to the health of our current and future employees). (57)

- With regard to public health and safety, the EIR/EIS states that several of the proposed landfills may increase the potential for hazardous materials incidents and claims that public health and safety impacts are generally site-specific. (Id. at 6-7.) However, what are the cumulative impacts of all of these landfills with respect to litter and disease vectors? (58)

- Traffic/noise (impacts to our current and future employees.) (59)

- The several landfills, hazardous waste sites and mines create a "waste corridor" in the desert. The impacts of this "waste corridor" on the areas proposed for protection under the pending Desert Protection Act must also be addressed. (60)

With regard to socioeconomics, the EIR/EIS overestimates the increased number of CLCI's workers. (EIR/EIS, p. 6-9.) CLCI estimates it will add four permanent workers per additional section of citrus, and 150 seasonal workers per section for the first four sections. After that, 50 seasonal workers per section will be added. We have provided these numbers to the County for inclusion in our EIR. (61)

The EIR/EIS fails to identify "reasonable options" for mitigating cumulative impacts as required by CEQA. (State CEQA Guidelines § 15130(b).) We request that the EIR/EIS be revised to provide more information about cumulative impacts and discuss reasonable options for mitigating them. (62)

V.

THE EIR'S EVALUATION OF ALTERNATIVES IS INADEQUATE

The EIR/EIS fails to consider as an alternative to this project improved recycling efforts or other non-landfill options. Such alternatives would better comport with AB 939 which requires waste reduction. Several courts have required agencies to analyze alternatives that differed substantially from the project in question as originally conceived. (E.g., Save Niobrara River Association, Inc. v. Andrus (D.Neb. 1977) 483 F.Supp. 844, 861-862 (agency required to consider improvements in agricultural production as an alternative to a dam and reservoir that would provide more water for irrigation); (Keith v. Volpe (D.Cal. 1972) 352 F.Supp. 1324, 1336 (different transportation systems should be considered as alternative to highway).) (63)

Both CEQA and NEPA have emphasized the importance of evaluating alternative sites. (Methow Valley Citizens Council v. Regional Forester (9th Cir. 1987) 833 F.2d 810; Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376.) Since the Eagle Mountain project in Riverside County has now been approved, the EIR/EIS should address the need for both "mega-landfills." Moreover, the EIR/EIS rejects the Eagle Mountain site as an infeasible alternative due to several environmental factors. However, Riverside County and the BLM found in the EIR for that project that many of those impacts were mitigable. (64)

Mr. Randy Scott
Mr. Doug Romoli
March 1, 1993
Page 21

The EIR/EIS should also explain why only certain counties were chosen as areas for evaluating alternative sites. Why not Los Angeles County -- the source of the waste? Why not Forest Service lands? These questions were raised by the BLM during the scoping sessions held for this project (Appendix 3) and appear not to have been addressed in the draft EIR/EIS. (65)

Many of the alternatives were rejected as infeasible because ATSF does not own the rail line. However, CEQA and NEPA place responsibility for evaluating alternatives on the lead agencies and not the project proponent. The County and BLM should consider whether other project applicants could utilize an environmentally superior site that ATSF cannot. (66)

The discussion of the Cadiz Valley alternative site fails to describe how crossing through our site would be achieved. This information is needed to evaluate whether this alternative is "feasible" under CEQA and NEPA. (67)

We cannot move our operation; Rail•Cycle can. We request that more environmentally appropriate sites be addressed.

IV.
CONCLUSION

We request that at the least, the EIR/EIS be revised and recirculated to reflect the concerns stated above. We believe, however, that the more prudent course of action would be to seek alternate locations or to forego this project altogether. The County and BLM should also seriously reconsider whether they want to do business with Waste Management, Inc. If you have questions about these comments, please feel free to contact me. (68)

We would appreciate receiving any notices about this project and request review of any additional environmental documents, including a revised draft EIR/EIR and the final EIR/EIS.

Yours sincerely,

Keith Brackpool
Chief Executive Officer

THE ATTACHMENTS TO THIS LETTER HAVE NOT BEEN INCLUDED DUE TO THEIR LENGTH. THE INFORMATION PROVIDED BY THE ATTACHMENTS HAS BEEN CONSIDERED IN DEVELOPING RESPONSES TO COMMENTS (SEE SPECIFIC RESPONSES). A COPY OF THE ATTACHMENTS IS ON FILE AT THE COUNTY PLANNING DEPARTMENT AND BLM FOR PUBLIC REVIEW.

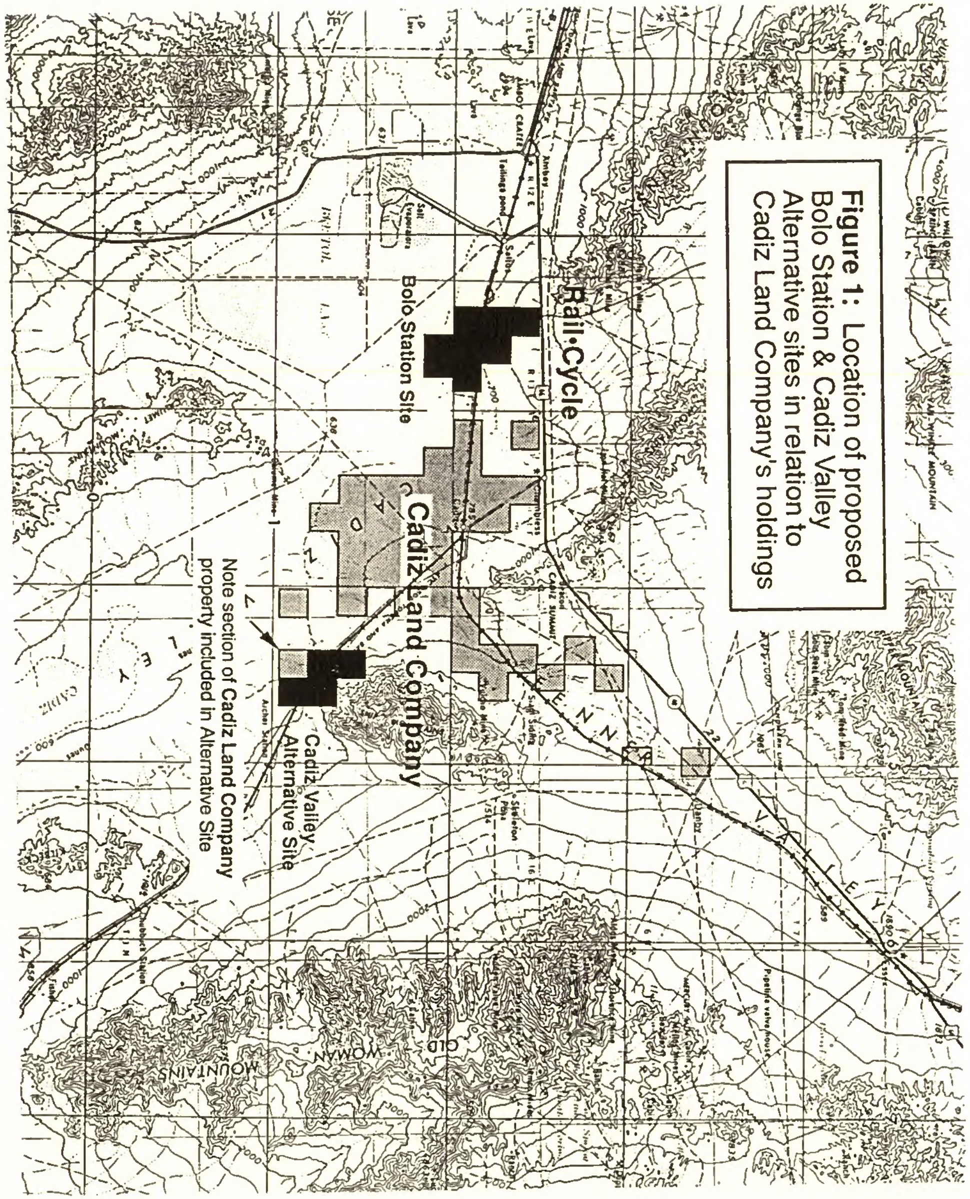


Figure 1: Location of proposed Bolo Station & Cadiz Valley Alternative sites in relation to Cadiz Land Company's holdings

Rail•Cycle
Bolo Station Site
Cadiz Land Company
Cadiz Valley Alternative Site
Note section of Cadiz Land Company property included in Alternative Site
CADIZ
VALLEY
OLD WOMAN MOUNTAINS

Table I

BASIC HYDROLOGICAL DATA FOR CADIZ LAND COMPANY, INC. PROJECT WATER WELLS

Well No.	Depth (ft)	Date Drilled	Static Water Level Below Well Pad (ft)	Estimated Wellhead Elevation	Elevation of Water Level (above sea level)	Measured Transmissivity (gal/day-ft)	Specific Capacity (gal/min/ft)	Maximum Production (gal/min)
TH1	760	May 84	140.5	728	588.5	NA	NA	NA
TH2	460	May 84	246.5	853	606.5	NA	NA	NA
TH3	720	May 84	164.2	761	597	NA	NA	NA
#33 (CAP-1)	790	Aug 84	138.2	728	590	18,200	14	1,875
#21 (CAP-2)	790	Aug 84	162.7	761	598	27,875	18	2,000
#28 (CAP-3)	800	Apr 87	155.7	738	582	15,800	8	2,000
#27S (CAP-4)	900	Apr 89	186.0	774	588	50,800	58	2,500
#27N (CAP-5)	800	Apr 89	194.0	787	593	81,200	13	2,000

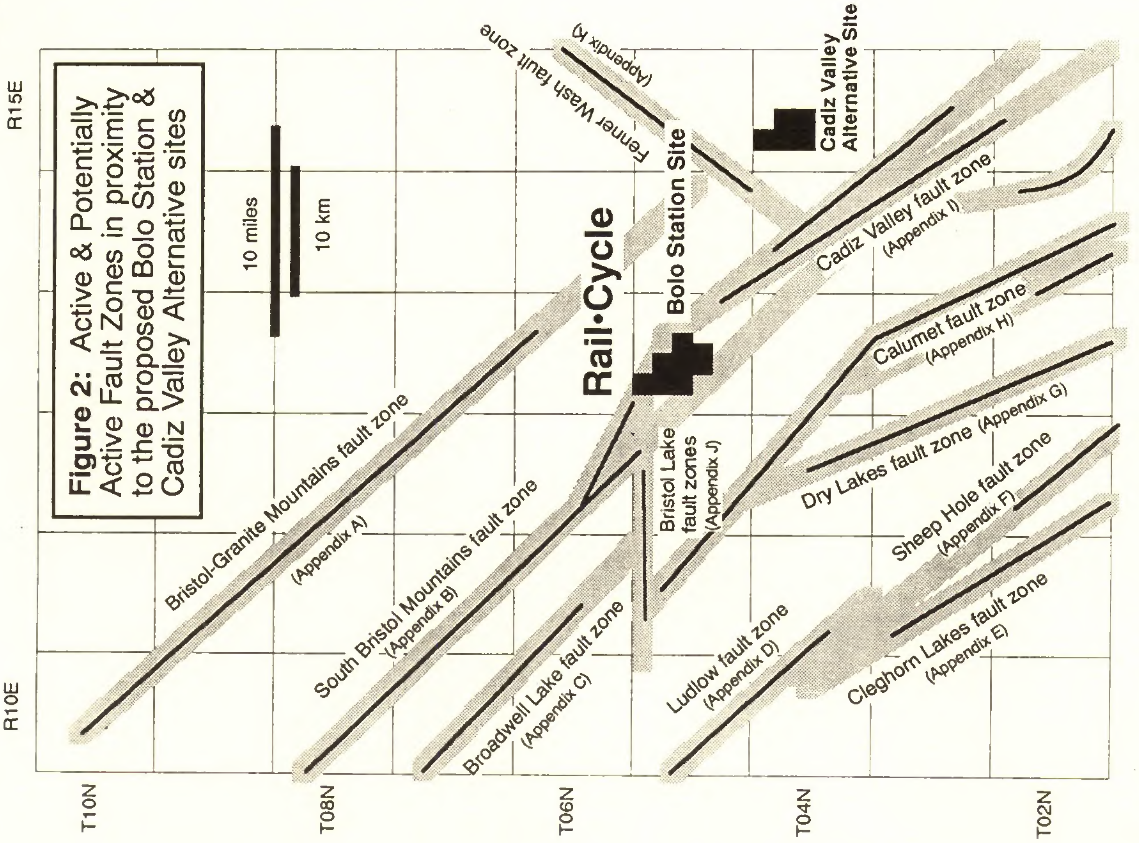


Figure 2: Active & Potentially Active Fault Zones in proximity to the proposed Bolo Station & Cadiz Valley Alternative sites

R10E
R15E
T10N
T08N
T06N
T04N
T02N
10 miles
10 km
Rail•Cycle
Bolo Station Site
Cadiz Valley Alternative Site
Bristol-Granite Mountains fault zone (Appendix A)
South Bristol Mountains fault zone (Appendix B)
Broadwell Lake fault zone (Appendix C)
Ludlow fault zone (Appendix D)
Cleghorn Lakes fault zone (Appendix E)
Sheep Hole fault zone (Appendix F)
Dry Lakes fault zone (Appendix G)
Calumet fault zone (Appendix H)
Cadiz Valley fault zone (Appendix I)
Bristol Lake fault zones (Appendix J)
Fenner Wash fault zone (Appendix K)

DOCUMENT 035
CADIZ LAND COMPANY, INC.
RESPONSE TO COMMENTS

Response 035-1

1. The County General Plan does not indicate that landfills are incompatible with agricultural uses. The County General Plan contains policies designed to protect prime agricultural lands from encroachment by urban uses, but has no specific policies regarding nonprime agricultural lands such as the CLC site and landfills. While it is acknowledged that CLC considers its lands to be unique, the County General Plan does not designate these lands as prime agricultural lands. Nevertheless, the County General Plan's policies are designed to assure environmentally safe landfill development, which protects natural resources, and would indicate that, with implementation of required protective measures, landfills and agricultural lands are not incompatible uses. Furthermore, the environmental analysis conducted in this EIR/EIS does not identify significant impacts to surrounding land uses, or effects of the proposed landfill which would adversely affect CLC's agricultural operations.

Response 035-2

1. CEQA and NEPA require that an EIR/EIS evaluate a proposed action's physical effects on the environment. The environmental effects of the proposed action as they relate to neighboring agricultural lands, were analyzed in the Draft EIR/EIS in Sections 5.4, 5.7, and 5.14. The Draft EIR/EIS does not identify significant impacts to the neighboring agricultural operations. A buffer of one mile exists between the land holdings of CLC and the proposed action. When the current agricultural operations and the proposed expansion of CLC are considered, the distance from the proposed landfill is approximately two to three miles. It is not appropriate under the statutes for an EIR/EIS to speculate as to the psychological ramifications that a proposed action may have on any one segment of the population, (i.e., produce consumers who may or may not be aware of the fact that the source of their purchase was located in the vicinity of a landfill).

2. There is no factual evidence provided by the comment, except the opinion of the commenter, that the proposed action would affect the public's perception of the crops grown by CLC.

Response 035-3

1. Section 2.5 of the Draft EIR/EIS discussed the scoping process for the proposed action, which included a Notice of Preparation sent to state and local agencies and individuals, including CLC and public meetings. These meetings were announced by a BLM news release on July 14, 1991, and published in the Federal Register on August 9, 1991. The Draft EIR/EIS was released for a 90-day public review and comment period, during which time three public hearings were held by BLM. The purpose of these meetings and notifications was to inform the interested public of the proposed action and its environmental effects.

2. According to Rail•Cycle, several contacts have been made with CLC over the past three years. These contacts include telephone calls to CLC headquarters in an attempt to set a meeting between the directors of Rail•Cycle and CLC. The following information about contact between Rail•Cycle and CLC recorded in memoranda in the files of Garth R. Morgan, Ph.D., Senior Special Projects Engineer for Rail•Cycle was provided:

    - On May 23, 1991, Mr. Louis E. Gonzalez, Vice President of CLC, and Ed Flenniken and Garth Morgan, both of Rail•Cycle, met to discuss the proposed Bolo Station Landfill project, beginning with permitting to construct and operate. The liner system and its safeguards were discussed. Mr. Gonzalez stated he was satisfied that the area's ground water would be protected. At that time, Rail•Cycle was considering composting activities at the facility. Mr. Gonzalez expressed interest in obtaining compost for development of CLC soils to improve production. Mr. Gonzalez also stated that the long-range plans for CLC properties is to develop a resort community. Dr. Morgan offered to supply CLC with a set of Phase I, Site Characterization reports and a set of the Conceptual Site Development Plans.

    - On June 19, 1991, a meeting was held with Mr. Gonzalez and Dr. Morgan, during which Dr. Morgan delivered the Phase I - Site Characterization reports plus a set of Conceptual Site Development Plans.

Dr. Morgan expressed an interest in meeting with the then-Vice President of Pacific Agricultural Holdings, Inc., Mr. Tom Morrison, to discuss the project. Efforts to arrange a meeting with Mr. Morrison were made by Rail•Cycle but Mr. Morrison was not available.

- Rail•Cycle continued to attempt to set a meeting with CLC at their Cadiz and Fresno offices. Rail•Cycle's telephone calls about a meeting were not returned.
- Mr. Gonzalez reported at a July 1991 meeting with Rail•Cycle that he had reviewed the Conceptual Site Development Plans with Mr. Morrison, and Dr. Morgan again requested a meeting with Mr. Morrison. Mr. Gonzalez replied that setting a meeting during the summer growing session would be difficult and suggested trying to set a meeting in the fall or winter, when the agricultural operations are slow.
- On February 20, 1992, Dr. Morgan contacted Mr. Morrison's office in Fresno and was told that Mr. Morrison had resigned and that Mr. George Rice had taken his place. Dr. Morgan spoke with Mr. Rice's secretary and suggested setting a meeting to present the proposed Bolo Station Landfill project to Mr. Rice and others CLC believed should be informed. Dr. Morgan offered to meet either at the Fresno or Cadiz offices of CLC. No response was received from Mr. Rice. Additional telephone calls made by directors of Rail•Cycle to Mr. Rice have not been returned.

3. The proposed expansion and land holdings of CLC was discussed in Sections 4.2.2 and 6.2.3 of the Supplement.

Response 035-4

1. CEQA and NEPA require that an EIR/EIS consider alternative sites, even if the applicant does not own the alternative site. It is not required that the property owner be contacted when evaluating the property's suitability for inclusion as an alternative site. The availability of the site for implementation of an alternative is relevant to determining an alternative's feasibility. If the land is not owned by the applicant and cannot be acquired for development of the proposed action, then that land would not represent a reasonable or feasible alternative to the proposed action. The Draft EIR/EIS indicated that the Cadiz Valley Alternative site is not preferable to the proposed project site; if it were, the ability of Rail•Cycle to acquire lands at that alternative site, including CLC lands, would be an appropriate consideration in decision makers' deliberations regarding the project.

Response 035-5

1. To enhance public understanding of how a MRF might serve the proposed action, a description of a typical MRF was provided in Section 3.2.2 of the Draft EIR/EIS. However, inclusion of this general description should not be construed to mean that construction and operation of MRFs is a part of the proposed action. Currently, only the MRF in the City of Commerce has been approved. Any effort on the part of the EIR/EIS to predict where additional MRFs could be located, and to try to assess those impacts, would be speculative and misleading. CEQA and NEPA do not require speculative analysis.

2. The EIR/EIS evaluates impacts related to the transfer of solid waste by rail to the proposed landfill. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs to the proposed site are evaluated in Sections 5.7, 5.8, 5.12 and 5.13 of the Draft EIR/EIS, respectively. Additional information regarding transportation and noise impacts along the rail haul route was included in Sections 5.4 and 5.5 of the supplement.

3. As noted above, it would be speculative and misleading for this EIR/EIS to address the potential site specific environmental impacts associated with the construction and operation of undefined Rail•Cycle MRF locations. However, typical impacts that potentially could occur at a MRF located in southern California have been addressed in recent EIRs for two specific MRFs.

   - City of Commerce MRF proposed by Rail•Cycle (David Evans and Associates, 1992).
   - West Valley MRF proposed by Kaiser/Burrtec in the City of Fontana (Chambers, 1993).

   The City of Commerce MRF is a Rail•Cycle project, whereas the Kaiser/Burrtec project is not affiliated with the project.

4. Based on the EIRs for the City of Commerce and West Valley MRFs, the following typical environmental impacts may occur from the construction and operation of other MRFs in southern California (David Evans and Associates, 1992; Chambers, 1993):

   - Onsite grading to prepare for the construction of structures, parking areas and roadways. It is anticipated that most MRFs would be located in existing industrial areas along existing rail lines. Therefore, natural landforms are not expected to be disturbed.
   - Southern California is subject to seismic activity and ground shaking. MRF structures would be required to conform to seismic standards included in the Uniform Building Code.
   - The sites would be covered with impermeable surfaces (i.e., structures and paved areas) that, depending on the specific site, would result in additional storm water runoff. Liquids from materials processed through the MRF and facility washdown water would be generated. Separate onsite surface water drainage and liquid/washdown water collection systems would be required to protect surface water quality.
   - The MRFs would result in short-term (i.e., construction) and long-term (i.e., operation) air emissions in an air basin (South Coast Air Basin) that is nonattainment for certain criteria pollutants. This includes increased levels of CO at roadway intersections from vehicular idling. Air emissions could be significant on both a local and regional basis. Various mitigation measures will be required to reduce the air emission impacts to the maximum extent practicable.
   - Depending on the specific site, the additional truck traffic associated with transporting waste to the MRF could impact local traffic and circulations. Roadway and intersection improvements to maintain an acceptable level of service (LOS) may be required.
   - As it is expected that the majority of MRFs would be constructed in existing industrial areas near existing rail lines, land use impacts are not anticipated. Typical land use issues that would need to be addressed include, but are not limited to, zoning and General Plan land use designations, surrounding land uses, noise, odor, lighting, aesthetics, and public utilities and services. Local jurisdictions would be responsible for assuring that land use issues are adequately addressed and that appropriate conditions of approval are established for each MRF.

   As noted above, the site-specific impacts for each MRF will be addressed in EIRs prepared by the local jurisdiction.

Response 035-6

1. At the request of the RWQCB, geophysical surveys were performed by Rail Cycle at the proposed site in May 1992 to verify the absence of Holocene faults. Extensive surveying included shallow and deep electromagnetics (EM), very low frequency (VLF) resistivity, ground penetrating radar (GPR), and seismic refraction and reflection. Based on the results of the geophysical survey, a field exploration program was conducted to evaluate the anomalies identified, which consisted of the excavation of four trenches approximately 10 feet in depth and ranging from 60 to 90 feet in length. The results of this subsequent fieldwork verify the findings of the Draft EIR/EIS, i.e., that there are no active faults within or in the vicinity of the proposed site.

2. The methodology and results of fieldwork were documented in Sections 4.1 and 5.1 of the Supplement. Based on the subsequent analyses in conjunction with the previous site characterization, it was concluded that there are no active or inactive faults within the vicinity of the proposed site (or which tend towards the site). In accordance with CCR Title 23 siting criteria for Class II or III landfills, the proposed landfill can be developed without any seismic structural setback requirements, if approved.

3 The source of the seismic maps in the Draft EIR/EIS (Figure 4.2.3 and 5.2.1) as referenced in this comment, was the California Department of Mines and Geology (CDMG). The maps reflect the most current tectonic data including the June 28, 1992 Landers earthquake swarm. Although it is recognized that mapping by independent sources may contradict the CDMG mapping, it is this agency's legislative mandate to identify and map active faults in the State of California (Alquist Priolo Special Studies Act 1972, California Public Resources Code Chapter 7.5). CDMG evaluates the research of all independent sources and confirms or discredits research that is not factual. The reliance on CDMG mapping, therefore, in conjunction with the thorough investigation conducted for the proposed project, is considered appropriate.

Response 035-7

1. As discussed in the previous response, CDMG mapping and studies were considered the authoritative source for fault mapping for the region. A more comprehensive discussion of the tectonic setting of the region and the procedures to determine the maximum credible earthquake peak ground acceleration and maximum probable earthquake at the proposed site were included in the *Phase II Geologic, Hydrogeologic and Geotechnical Site Characterization Study* for the site (Jacobs, 1991b).

Response 035-8

1. Sections 4.1 and 5.1 of the Supplement detailed supplemental geophysical surveys and trenching which was conducted subsequent to the Draft EIR/EIS to verify the absence of Holocene faulting. The studies are considered to be conclusive in determining that there are no inactive or active faults within, or in the vicinity of, the proposed site. The proposed landfill, therefore, could be developed in compliance with the regulations cited in the comment.

Response 035-9

1. As referenced in Response 035-6, under legislative mandate, CDMG is responsible for identifying and mapping earthquake activity. The Draft EIR/EIS relied on this authoritative source for mapping seismic activity in the region.

Response 035-10

1. Rail•Cycle completed the referenced geophysical survey, trenching, and boring program at the request of the RWQCB (Jacobs, 1992b; 1993a). This analysis confirmed the previous findings that indicated there are no Holocene faults at or trending towards the proposed site. The geophysical survey confirmed that which was already known, thereby further refining the data base. For a complete discussion of the results of this verification analysis, see Sections 4.1 and 5.1 of the Supplement.

Response 035-11

1. As with supporting technical reports that were prepared for the Draft EIR/EIS, the site verification study is available to the public for review at the County Planning Department and at BLM - California Desert District.

Response 035-12

1. As discussed in Response 035-10, the geophysical survey, trenching, and boring program confirmed the results and conclusions of the other work accomplished in preparation of the Draft EIR/EIS. This information was included in Section 4.1 and 5.1 of the Supplement. The conclusions and findings of the Draft EIR/EIS have been verified, and there is no reason to withdraw the Draft EIR/EIS.

Response 035-13

1. See Response 035-10.

Response 035-14

1. See Response 035-10.

Response 035-15

1. Rail•Cycle responded to CLC's request for information pertaining to the proposed landfill by providing site characterization reports and preliminary landfill design. Information on ground water sampling and analysis plus ground water movement was supplied for CLC review. CLC did not reciprocate with their known water quality and quantity information, stating it was privileged information. Due to the availability of information from public resources, limited data regarding ground water recharge of the Cadiz Valley was presented in the Draft EIR/EIS.

Response 035-16

1. No significant effect on local hydrogeology has been attributed to the apparent bedrock ridge identified in the site characterization studies.

Response 035-17

1. The characterization of the fresh water/brackish water interface was clarified in Section 4.2 of the Supplement based on the comment letter received from the SWRCB stating that under their criteria, waters of the state with TDS less than 3,000 mg/L is considered a potential municipal or domestic water supply (see Section 4.2 and Figure 4.2.2 of the Supplement). Additionally, Figure 4.2.2 has been updated since distribution of the Supplement and is included in Chapter 1.0 of this document.

2. Fresh ground water flowing under the proposed landfill site is upgradient from the brine interface. There is no potential for the landfill to contaminate other fresh water uses in the Bristol

Basin. However, as defined by the SWRCB, the majority of the ground water beneath the site meets the criteria for potable water. The landfill will be designed and operated to protect ground water from contamination as if it were drinking water.

Response 035-18

1. As discussed in Section 5.8.1.1.4 of the Draft EIR/EIS, a comprehensive hazardous material/waste load checking program would be implemented as part of the Rail•Cycle project. The Draft EIR/EIS did not include specific details regarding load checking; therefore, additional information is provided below to respond to this comment.

2. Prior to each waste load arriving at the working face of the landfill, the following four separate checks for hazardous material/waste would occur:

    - Each hauler transporting waste to the MRFs or other processing facility would be responsible for inspecting the waste for hazardous or suspicious waste. Waste haulers utilizing a specific MRF or processing facility would have a contract or business agreement with the facility specifying their responsibility for waste inspection. Waste from unknown waste haulers would not be accepted without a thorough inspection of the load.
    - Each load entering the MRFs or other processing facility would be visually inspected for hazardous or suspicious waste when the load is emptied on the tipping floor. Personnel at the facility would receive training in the identification and handling of hazardous or suspicious waste. Hazardous waste identified would be removed from the waste stream and temporarily stored (i.e., less than 90 days) in an appropriate area of the facility. Periodically these wastes would be transported by a licensed transporter to an approved disposal facility or other appropriate hazardous waste treatment facility.
    - Waste passing through the recyclable materials sorting lines at the MRFs or processing facility would undergo an additional visual inspection as part of the process. Hazardous waste identified through this process would be handled and managed as described above.
    - Each load arriving at the working face of the landfill would be visually inspected by landfill personnel trained to identify and handle hazardous or suspicious waste. Hazardous waste identified through this inspection would be taken to the temporary (i.e., less than 90 days) hazardous waste storage facility at the landfill. This facility was described in Section 3.3.2.4 of the Draft EIR/EIS. Periodically the wastes would be transported by a licensed transporter to an approved disposal facility or other appropriate hazardous waste treatment facility.

3. In addition to the process described above, in accordance with Subtitle D, a random load check program would be implemented at each MRF or other processing facility and the landfill. Selected loads would be tipped at a designated area at the facility or landfill and thoroughly inspected. The number of loads randomly selected would be established as part of the permitting process for each facility and the landfill by the CIWMB and responsible LEA.

4. As stated in Section 5.8.1.1.4 of the Draft EIR/EIS, to assure that waste transported to the proposed landfill has undergone a load checking program, Rail•Cycle would not accept waste from MRFs or other processing facilities not operated by WMNA unless the operator provides evidence of an equivalent load checking program. For waste from a facility to be accepted for transport to the proposed landfill, the facility must have a valid permit issued by the responsible LEA and CIWMB, and demonstrate its compliance with applicable conditions of the permit.

Response 035-19

1. The proposed landfill liner and alternate landfill liner systems were described in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement. A detailed analysis of the evaluation of the alternative liner has been conducted (Rust, 1993a). Also included in the report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J.E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates of from 0.003 to 0.6 gallons (assuming holes in the primary and secondary liners were aligned) per acre

per year depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

2. Even if a breach in the landfill liner should occur, it is physically impossible for any subsurface contamination from the landfill site to affect agricultural properties or any other use of fresh water in the basin. Ground water movement in the Bristol Dry Lake basin is toward the lake bed from the surrounding mountain ranges; it does not move from the landfill site toward CLC properties.

3. The proposed action includes a redundant liner system, horizontal and vertical gas collection wells, and a unique UZM system for early detection in the remote possibility of a gas or liquid release (please refer to Chapter 3.0 of the Supplement for further detail). There will be no impact to CLC from the improbable release of liquids or gas.

Response 035-20

1. CEQA and NEPA require that an EIR/EIS evaluate a proposed action's physical effects on the environment. The environmental effects of the proposed action as they relate to neighboring agricultural lands were analyzed in Sections 5.4, 5.7, and 5.14 of the Draft EIR/EIS. The Draft EIR/EIS does not identify significant impacts to the neighboring agricultural operations. A buffer of two mile exists between the land holdings of CLC and the proposed action. When the current agricultural operations and the proposed expansion of CLC are considered, the distance from the proposed landfill is approximately two to three miles.

Response 035-21

1. Ground water flowing under the proposed site is directly upgradient from the brine interface. Therefore, there is not a potential for other fresh water uses in the Bristol Basin to be affected. Nevertheless, the proposed landfill would be designed and operated to protect ground water as if it were drinking water. The proposed landfill's double liner system, from a leakage perspective, is superior to both the Subtitle D and California standards for liners.

2. The direction of ground water flow at the proposed site is south, towards Bristol Dry Lake. CLC's land and crops are located east of the proposed site, and CLC's wells are located approximately five miles east of the site. Due to the direction of ground water flow, CLC land and crops could not be affected by materials deposited at the proposed landfill.

Response 035-22

1. Subsequent hydrogeologic analyses were conducted which included an evaluation of the potential effect of ground settlement on the underlying aquifer (Jacobs, 1993b). The results of additional soil analyses were summarized in Sections 4.2 and 5.2 of the Supplement. The settlement related to the landfill would have a negligible effect on ground water flow in the aquifer.

Response 035-23

1. As shown in Figure 4.4.2 of the Draft EIR/EIS, the main channel of the Orange Blossom Wash runs several miles east of the proposed site. It is intercepted by the Chambless Wash, which extends toward the southeasterly corner of the site (Section 22). Although there is no current evidence of significant drainage or flow across Rail•Cycle property, it is appropriate to observe and evaluate conditions in this area and to provide any needed flood protection elements before constructing landfill features in this vicinity. Refinements in the project design with regard to drainage control were included in Chapter 3.0 of the Supplement. Stormwater run-on and runoff control features at the site would be constructed for the 100-year, 24-hour storm event.

Response 035-24

1. The proposed alternative site is located on the crest of an alluvial plain and would not be subject to flooding by the Fenner Valley Wash in the event of a 100-year flood.

Response 035-25

1. Hydrologic design of the landfill and support facilities has been based on procedures included in the County Hydrology Manual. Ten different drainage areas with a combined drainage area of over 75 square miles were defined and analyzed (Rust, 1994). As specified in the Supplement (Chapter 3.0), storm drainage facilities would be constructed to accommodate a 100-year, 24-hour storm event.

2. CLC's properties are 80- to 160-feet higher in elevation than the 100-year flood level of Bristol Dry Lake and located on the easterly shore of the lake. The proposed project site is located on the

north shore of the lake. Drainage offsite will flow south toward the Bristol Dry Lake playa. Alteration of drainage patterns would not lead to flooding of the CLC property which is two miles east of the proposed site and, as mentioned, at an elevation higher than the southern-most portion of the proposed landfill. The Chambless Wash lies between the proposed site and the closest CLC property. It is not possible for surface water crossing the proposed site to impact CLC properties.

Response 035-26

1. To respond to this comment, a report was prepared addressing the potential for disease vectors to be attracted to agricultural crops in the vicinity of the proposed landfill. The report, *Agricultural Impact Report - The Potential Impact on Local Agriculture From the Proposed Rail•Cycle Bolo Station Landfill,* was prepared by Edwin Barnes, Ph.D., and summarizes experiences reported by researchers at Cal Poly (Barnes, 1993). The report addressed the potential for insect/nuisance vectors to be introduced into agricultural zones and referenced the following agricultural operations conducted in proximity to currently operating landfills:
   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile of the 2,800 ton per day County of Los Angeles Spadra Landfill.
   - Privately owned and operated orchards situated in proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.
2. The following discussion highlights the findings of the above report:
   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported health or safety impacts.
   - Negative effects, attributable to landfill operations on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Unpaved internal roads within the Cal Poly campus farm are responsible for more fugitive dust-related impacts on agricultural operations than fugitive dust emitted from the Spadra Landfill.
   - Citrus trees located three-tenths of a mile from the Highgrove Landfill do not exhibit more dust or dirt than trees one mile away and in the middle of the orchards.
   - The Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.
3. The following mitigation measures were recommended in the report to minimize potential agricultural impacts:
   - Implementation of fugitive dust control measures, including watering, use of dust abatement products, construction of berms, speed limit controls, and curtailing operations during occasional high winds. This mitigation measure is already included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Installation of a pole and wire system or some other effective alternative for control of birds. This mitigation measure is included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.
4. Based on the above findings and mitigation measures, the marketability of CLC produce is not expected to be affected by development and operation of the proposed landfill.

Response 035-27

1. See Response 035-26.

Response 035-28

1. Bolo Station is in an area that experiences lower velocity winds than various other areas in which landfills are operated in conformance with the litter control conditions of their permits. For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County,

California (data from January through December 1991) is provided below:

PERCENTAGE OF HOURLY OBSERVED WIND SPEEDS

Wind Speed Higher Than:	Bolo Station	Altamont
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

2. The Altamont Landfill is located in an area of relatively constant wind velocity and has attracted wind-powered, electricity-generating facilities. According to WMNA, this landfill is operated in compliance with the conditions of its SWFP including litter control. The Altamont Landfill is permitted to receive up to 11,500 tons of waste per day and typically receives 6,000 tons of waste on a daily basis. The majority of waste is transported to the site by transfer trailers that are tipped at the working face using a portable tipper similar to those proposed at Bolo Station.

3. Litter control measures for the proposed Bolo Station Landfill were discussed in Section 3.3.2.1.3 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected onsite.

4. An important point to note is that by primarily accepting post-recycled waste or waste that has been processed through a MRF, as will be required as a condition of the County, a significant portion of the primary source of litter at most landfills would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the litter control measures that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

5. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program that shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high wind velocity. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

6. In addition, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) in which Rail•Cycle shall determine (in conjunction with the LEA and CIWMB) the optimum size of the working face for anticipated daily waste volumes to minimize litter.

7. Regarding the raven issue, in cooperation with BLM, USFWS, CDFG, and Rail•Cycle completed a one-year baseline study to measure and assess existing raven populations within a 30-mile radius of the Bolo Station site. The study may be continued after startup of landfill operations. If comparison of data indicates that ravens are being attracted to the site, or if an increase in ravens in the general area can be attributed to the landfill, additional measures would be implemented in consultation with BLM, USFWS, and CDFG.

8. It should be noted that results of the first four months of study (December 1992 - March 1992) identified the largest population of ravens within the study area at the CLC vineyard and citrus groves, followed by the community of Ludlow, the abandoned town of Cadiz and the railroad, and lastly, the town of Goffs. Flocks of as many as 62 ravens were counted on CLC property.

Response 035-29

1. See Response 035-18 regarding details for the hazardous materials/waste load checking program that would be implemented as part of the proposed landfill operations.

2. Section 5.8 of the Draft EIR/EIS described the potential for fire hazards and determined that the potential for spread of surface fires is low and not considered significant. In addition, subsequent to distribution of the Draft EIR/EIS, Rail•Cycle agreed to construct a new County fire/paramedic/sheriff station at the entrance of the proposed landfill (see Section 3.2.5 of the Supplement).

3. As stated in Response 035-26, subsequent studies have found no significant impact regarding the potential for effects to an agricultural operation from an adjacent landfill.

Response 035-30

1. See Response 035-29.

Response 035-31

1. As discussed in Section 3.2.2 of the Draft EIR/EIS, the containers used to transport

solid waste from the MRFs to the proposed landfill would be constructed to assure that liquids do not escape. After loading at the MRF, and during transit to Bolo Station, fresh air would not be allowed to flow through the containers. The containers would be equipped with a vent hatch which would be closed at all times, except at the landfill working face, where it would be opened to allow air to enter the container to assist in tipping of solid waste from the container.

2. While the containers would be leakproof for liquids, they would not be air-tight, and would be capable of compensating for fluctuations in air volume caused by partial decomposition of solid waste, and changes in temperature (may range between 60 and 120°F) and pressure (due to elevation differences) along the rail line between Los Angeles and Bolo Station. Therefore, pressure would not build up within the containers, creating a potential safety or fire hazard, as suggested by this comment.

3. As the containers would be capable of venting excess vapors to the atmosphere, a brief screening analysis was conducted to determine the potential "worst case" venting of odors from the containers during transit, and at the landfill. The following five mechanisms could cause venting:
   - Landfill gas generation caused by aerobic decomposition.
   - Landfill gas generation caused by anaerobic decomposition.
   - Increases in temperature inside the container causing the inside air to expand.
   - Decreases in the container internal pressure caused by decreases in external pressure when the train gains elevation.
   - Diffusion of air from inside the container to the atmosphere.

4. Two scenarios are addressed as part of this analysis:
   - Gases are vented during a typical 10-hour trip from a MRF to the proposed landfill.
   - Gases are vented during a 10-hour trip from a MRF to the proposed landfill which has been interrupted by a 24-hour delay, due to temporary rail line closure or other unexpected delays.

5. Some components of solid waste would begin to decompose prior to collection, and would continue to decompose during transit from the MRF to the landfill. During this early period, decomposition would proceed by aerobic processes that produce carbon dioxide and water vapor, rather than by anaerobic processes that produce carbon dioxide, methane, and odorous VOCs. To respond to this comment, a worst-case assumption has been analyzed in that decomposition in the containers is anaerobic. Under this assumption, it is estimated that 3.2 cubic feet of landfill gas would be generated during a typical 10-hour trip from MRF to the landfill, and 10.9 cubic feet of landfill gas would be generated during a typical 10-hour trip from MRF to the landfill, followed by an unexpected 24-hour delay. These gas generation rates are based on the following assumptions:
   - A container holds 30 tons of solid waste.
   - Based on CARB's 1990 document, *Suggested Control Measure for Landfill Gas Emissions* (CARB, 1990), 972 tons of methane are generated per one million tons of solid waste per year. According to CARB, landfill gas is comprised of approximately 50 percent methane, and 50 percent carbon dioxide, and trace amounts of VOCs.
   - Gas volume is calculated using the Ideal Gas Law (an equation which defines the relationship between volume, temperature, and atmospheric), assuming a temperature of 60°F, and atmospheric pressure of 1 atmosphere.

6. Maximum potential increase in air volume inside a container resulting from changes in atmospheric temperature and pressure along the rail line between Los Angeles and Bolo Station is estimated to be approximately 29.1 percent. This volume increase was calculated using the Ideal Gas Law and the following assumptions:
   - Maximum potential temperature change is from 60°F at Los Angeles to 120°F at Bolo Station.
   - Maximum potential change in elevation is from sea level (0 feet) to the Cajon Pass (4,200 feet above mean sea level).
   - Temperature and elevation changes occur simultaneously.

7. Based on the above gas generation and air volume estimates, approximately 268 cubic feet of air and landfill gas would be vented from a container during a typical 10-hour trip from MRF to the landfill, and 278 cubic feet of air and landfill gas would be vented from a container during a typical 10-hour trip from MRF to the landfill, followed by an unexpected 24-hour delay. These estimates

are based on the assumption that, after being loaded with compressed solid waste at the MRF, the container has approximately 907 cubic feet of void air volume.

8. Although several odorous organic compounds exist in landfill gas, rotten egg-smelling hydrogen sulfide (H_2S) is assumed to be the most noticeable compound. Gases emitted from a container are estimated to contain approximately 35 parts per billion H_2S by volume (ppbv) for a typical 10-hour trip from MRF to the landfill, and 119 ppbv H_2S for a typical 10-hour trip from MRF to the landfill, followed by an unexpected 24-hour delay. These H_2S emission estimates are based on the following assumptions:
   - Landfill gas comprises approximately 0.35 percent of the total gas volume inside the container during a typical 10-hour trip from MRF to the landfill.
   - Landfill gas comprises approximately 1.19 percent of the total gas volume inside the container during a typical 10-hour trip from MRF to the landfill, followed by an unexpected 24-hour delay.
   - H_2S concentration in landfill gas inside the container is similar to the highest H_2S concentration observed at a southern California landfill (10,000 ppbv).
   - H_2S is present in gases vented from the container in the same concentration as inside the container.

9. H_2S is detected by humans at a concentration of approximately 780 ppbv (Montgomery, 1985). H_2S concentrations in gases emitted directly from the container are below this threshold value for both scenarios. Substantial dilution of emitted gases (several orders of magnitude) would occur as a result of the amount of air displaced by the train while it is in motion, and as the train wake air disperses off the railroad right-of-way. Therefore, odors emitted from containers during normal transit and unexpected delays are not expected to be detectable.

Response 035-32

1. Existing noise levels from train traffic on the rail line were estimated in Section 5.13 of the Draft EIR/EIS to be approximately 65 dBA at 400 feet from the tracks, and 57 dBA at 1,200 feet from the tracks. Rail•Cycle trains would not travel east of the Bolo Station site. Therefore, there would be no increase in these train traffic-related noise levels at the CLC property.

2. Noise levels associated with landfill operations at Bolo Station were estimated in Section 5.13 of the Draft EIR/EIS to be approximately 65 dBA at 400 to 500 feet from the active working face, and 50 dBA at 2,000 feet from the active working face. Therefore, at a distance of less than 0.5 mile from the active working face, noise levels associated with landfill operations would be less than existing train traffic-related noise levels. CLC worker housing is approximately five miles, or approximately 24,000 feet from the perimeter of the proposed landfill. Applying the inverse-square law, which states that noise levels decrease approximately 6 dBA for each doubling of distance from the source, landfill-related noise levels are expected to decrease to a level of 30 dBA at CLC worker housing. This is equivalent to noise levels typical of a country residence, or empty concert hall.

Response 035-33

1. Section 5.8.1 of the Draft EIR/EIS concluded that offsite odor impacts would not be significant. Furthermore, Response 035-31 discussed the results of supplemental analyses which determined that odors vented from containers transporting solid waste to the landfill would not be detectable. Therefore, landfill odors would not be detectable by CLC workers.

Response 035-34

1. Sections 5.8.1.1.1 and 5.8.1.1.2 of the Draft EIR/EIS addressed the potential for fires to occur at the landfill. In both cases, it was concluded that there is little possibility for these types of fires to occur at Bolo Station. Therefore, there is no necessity to perform air quality analyses to evaluate potential impacts from fires at the proposed landfill.

2. Section 4.7.1 of the Draft EIR/EIS discusses regional meteorological conditions in the SEDAB, and presents the results of meteorological and ambient air quality monitoring performed by Rail•Cycle at the Bolo Station site from March 1991 through February 1992. These data were used as input to the air quality impact analyses documented in Section 5.7.1.2 of the Draft EIR/EIS. These analyses, as documented in Section 5.7.1.2.5 of the Draft EIR/EIS, indicate that air contaminant emissions from the proposed landfill would not result in adverse air quality impacts or crop damage at CLC.

Response 035-35

1. Responses 035-33 and 035-34, and analyses documented in Section 5.7 of the Draft EIR/EIS indicate that air contaminant emissions from the proposed landfill would not result in adverse air quality impacts upon workers or crop damage at CLC.

Response 035-36

1. Mitigation measures for dust impacts from landfill operations were included in Section 5.7 of the Draft EIR/EIS and would also be incorporated with regard to daily cover.

Response 035-37

1. See Response 035-29.

Response 035-38

1. Revised analysis regarding vehicle waiting times at rail crossings was included in Section 4.4 and 5.4 of the Supplement. As discussed in the Supplement, this analysis determined that impacts from Rail•Cycle trains and the cumulative impacts from the users of the rail lines (i.e., ATSF, Metrolink, and Amtrak) on vehicle waiting time at rail crossings would not be significant.

Response 035-39

1. As discussed in Section 3.3.2.2 of the Draft EIR/EIS, a "run-around" track would be provided within the railyard/offloading facility of the proposed landfill to allow locomotives to reverse direction in the yard and depart the site. This method of turning trains around in a railyard prevents the main rail lines from being disrupted by trains entering the line.

2. Based on the design for the railyard at the proposed landfill, the rail service to CLC would not be affected as Rail•Cycle trains would not cross Cadiz Road.

Response 035-40

1. Rail•Cycle trains would stop two to three miles west of CLC. Therefore, in the unlikely event of a derailment of a Rail•Cycle train, it could not occur near the CLC operations.

Response 035-41

1. If noise devices are used to control ravens at the proposed landfill, they would only be required during daylight hours. While the noise generated by such devices is meant to startle birds, the sound would not travel the five to six miles distance to the farm labor housing at CLC.

Response 035-42

1. See Response 035-32.

Response 035-43

1. Policy C-51 of the County General Plan regards protection of prime agricultural lands. The CLC holdings are not designated by the County General Plan as prime agricultural land on its land use maps. Policy C-53 of the County General Plan is associated with mineral resources and is not relevant to the issue of landfill compatibility with agricultural uses.

2. While it is true that the County General Plan discourages uses that would adversely affect prime agricultural lands, the General Plan does not indicate that a landfill is necessarily incompatible with agricultural uses. Policies within the Solid Waste Management Element of the County General Plan address issues related to the compatibility of landfills and agricultural uses. For example, Policy SW-1(b) recommends that the County "Operate solid waste disposal facilities in a manner which takes precautionary measure against ground and surface water protection." The proposed landfill would be designed to provide maximum protection to ground and surface water, according to applicable local, state, and federal regulations. Policy SA-2(h) advises "establishment of necessary buffers between agricultural and/or other uses." A buffer of one mile exists between the land holdings of the CLC and the proposed site. When the current agricultural operations and the proposed expansion of CLC are considered, the distance from the proposed landfill is approximately two to three miles.

3. While the General Plan has no specific policies regarding nonprime agricultural lands such as the CLC site and landfills, the County General Plan, which is designed to assure environmentally safe landfill development to protect natural resources, indicates that, with implementation of required protective measures, a landfill and agricultural lands are not incompatible.

Response 035-44

1. Section 5.14.1.2 of the Draft EIR/EIS incorrectly indicated that the proposed project would require reclassification of the land use designation of the

proposed site from Resource Conservation to a land use that would allow more intensive use of the site. If the County Board of Supervisors approves the proposed project, the County General Plan would be amended to revise the Infrastructure/Improvement Level Map and accompanying text to designate the site as the Bolo Station Landfill. The land use designation of Resource Conservation would be applied to the former public (i.e., BLM) land sections. The remaining sections of land at the proposed site are currently designated as Resource Conservation and would remain as such if the proposed action is approved.

2. The proposed General Plan amendment is the mechanism for revising the Infrastructure/ Improvement Level Map and text to designate the site as a landfill. The General Plan Amendment would be considered by the County Board of Supervisors during its consideration of the proposed project.

Response 035-45

1. AB 2296 provides the County with the authority to approve a landfill that is not identified in an approved CoSWMP or CoIWMP provided that the County Board of Supervisors and a majority of cities and towns having a majority of the population within the County approve, by resolution, a "Site Identification and Description" that sites the facility. If the proposed Bolo Station Landfill were to be approved prior to adoption of the CoIWMP, or if it were not included in an approved CoIWMP, this alternate approval mechanism allowed under AB 2296 could be used.

2. The proposed action is described in the Draft CoSWMP 1989-1990 Update (Draft CoSWMP) as a proposed long-term, regional, private industry site serving municipal solid waste. The Draft CoSWMP acknowledges that, "Landfills will continue to be an essential means of solid waste disposal throughout the planning period." As of 1990, the County's public landfill capacity was sufficient to last through 1998 at the then-current rates of source reduction and recycling, or through 2001 under the CoSWMP recycling and source reduction guidelines.

3. The Draft CoSWMP established the following draft policies regarding landfills:
   - Siting of new landfills by the private sector should be encouraged if such facilities will: (1) benefit the County solid waste management system; (2) assist in meeting the County waste reduction goals; (3) comply with all existing environmental regulations; and (4) be compatible with state and federal clean air regulations over its expected life span.
   - Wastes should be transferred to disposal sites in the desert or valley throughout the duration of the planning period.

4. The proposed action is consistent with the following policies of the Draft CoSWMP pertaining to County's role in landfill development:
   - Assure that disposal facilities' capacities and locations are sufficient and appropriate to cost-effectively serve the County (Policy M-3.12.1).
   - Encourage siting of landfills by the private sector to dispose County wastes if the facilities: (1) comply with existing regulations; (2) will be compatible with foreseen future regulations; and (3) can be integrated into the county-wide solid waste management system including postsorting of all direct-hauled wastes and system mitigation funding (Policy M-3.13.4).
   - Assure sufficient capacity is available to dispose of non-recovered solid wastes through 2050 (Policy O-3.14).
   - Assure that land uses adjacent to new and existing solid waste facilities do not or will not encroach on or interfere with existing and proposed solid waste management operations or capacities (Policy O-7.2).
   - Jurisdictions shall enforce state law, which limits developments adjacent to solid waste facilities to those which will not threaten the facilities' long-term use (Policy P-7.2-1).
   - Solid waste management operations shall be monitored to assure that negative impacts to adjacent properties are minimized (Policy P-7.2.2).

5. In addition, the proposed action is consistent with the Draft Administration Objectives, Policies and Measures for CoSWMP implementation by private industry, which include the following:
   - Implementation and administration of a cost-effective, environmentally-sound, integrated solid waste management program that meets or exceeds CoSWMP and state source reduction and recycling objectives (Policy O-6.1).

- Promotion, encouragement and participation in regional or inter-county solutions to solid waste management problems if the regional programs are demonstrated to be in the best interest of the citizens of San Bernardino County (Policy O-6.3).
- Source reduction and recycling of the solid waste stream shall occur prior to disposal and shall be maximized to meet or exceed regulatory standards (Policy P-6.1.3).
- Recovery of other unrecycled wastes for composting or other processing shall also be maximized (Policy P-6.1.4).
- Cities and special districts shall retain the right to dispose or utilize their solid waste to their best advantage provided each proposal for disposal or utilization is in conformance with the CoSWMP (Policy P-6.1.9).
- The General Land Use Plan and environmental constraint maps of San Bernardino County shall be among the means used to determine areas in the County that are suitable for disposal sites (Policy P-6.1.11).
- Assurance of flexibility of solid waste facility designs to permit inclusion of new transport, recycling, transfer or disposal technologies that increase the cost-effectiveness of the system, or better conform to environmental standards (Policy P-6.1.12).
- Landfill sites shall be reclaimed for future use following closure in accordance with the local General Plan and shall comply with location restrictions established by the federal, state and local government (Policy P-6.1.13).

6. Based on the analysis presented in the Draft CoSWMP regarding the need for long-term landfill capacity in the County, and the County's goals regarding short-term development of privately initiated landfills, the proposed action can be considered to be consistent with the Draft CoSWMP.

7. While the commenter is correct that the Draft CoSWMP was not adopted, the reason it was not adopted was due to the passage of AB 939 and the requirement for the County to produce a CIWMP. A date for submission of the CIWMP has not been established by the CIWMB; therefore, it is appropriate to consider the proposed action in relationship to the policies and objectives of the Draft CoSWMP.

Response 035-46

1. It is generally accepted that CEQA allows some flexibility regarding the extent to which agencies may defer the formulation of precise mitigation measures until after project approval (Remy, Thomas and Moose, 1992). The cases utilized to arrive at this conclusion include *Sundstrom v. County of Mendocino* (1988), as cited in the comment, as well as the well-known *Laurel Heights Improvement Association v. Regents of the University of California.* Such cases are examples whereby project approval was granted although the formulation of precise means of mitigating impacts is infeasible or impractical at the time of project approval (Remy, Thomas, and Moose, 1992).

2. In such cases, the approving agency should commit itself to working out such measures as can be feasibly devised, where treating the impacts in question as being significant at the time of project approval. Alternatively, for impacts for which mitigation is known to be feasible, but where practical considerations prohibit devising such measures early in the planning process, the agency can commit itself to eventually devising measures that will satisfy specific performance criteria articulated at the time of project approval, the agency should be able to rely on its commitment as evidence that significant impacts will in fact be mitigated (Remy, Thomas, and Moose, 1992).

Response 035-47

1. Illegal dumping near landfill sites occurs when self haulers either will not or cannot pay the disposal fee at the landfill. Rail•Cycle would eliminate this problem by providing free disposal for local residents at the onsite public drop-off area at the proposed landfill. This is expected to eliminate illegal dumping near the proposed landfill.

2. Rail•Cycle would implement litter control measures at the proposed landfill that are designed to contain litter within an area that is much smaller than the site perimeter and that can be effectively controlled. The litter control program would rely on multiple lines of containment as close to the active face as feasible, in accordance with operating conditions and safety factors. These measures were described in Section 3.3.2.1.4 of the Draft EIR/EIS and Response 035-28.

3. The mitigation measures included in Section 5.8.1.1.5 of the Draft EIR/EIS would also mitigate offsite litter.

Response 035-48

1. A preliminary closure/postclosure monitoring and maintenance plan for the proposed landfill is required prior to the issuance of the SWFP. Rail•Cycle will submit a plan as part of the SWFP application. In addition, Rail•Cycle will attempt to obtain CIWMB concurrence for the closure/postclosure funding mechanism at the earliest possible date. There is no requirement that this plan be included in the Draft EIR/EIS.

Response 035-49

1. The Mitigation Monitoring and Compliance Program for the proposed action has been prepared and will be considered by the County Board of Supervisors during its hearing regarding certification of this Final EIR/EIS.

Response 035-50

1. The environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure that the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to compliance with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 035-51

1. The responsibilities of the Rail•Cycle joint venture partners are based on the specific area of expertise of WMNA and ATSF. As an owner/operator of over 130 landfills throughout North America, WMNA is responsible for the design, construction and operation of the proposed landfill.

2. ATSF is one of the largest railroad companies in the Unites States. ATSF is the owner/operator of the majority of the rail routes to be used for the proposed action and would be the owner/operator of the railroad equipment (locomotives and railcars) used to transport waste from the proposed MRFs in southern California to the proposed landfill. ATSF is responsible for the operation and maintenance of the rail lines and railroad equipment.

3. See Response 035-50 regarding monitoring responsibilities.

Response 035-52

1. As stated in Section 4.4.2 and shown in Figure 4.4.6 of the Draft EIR/EIS, ground water in the area of the proposed action does not flow toward CLC property, and potential contamination would not impact CLC operations. Therefore, no cumulative impacts from the proposed actions are expected.

Response 035-53

1. As reviewed in other responses, onsite seismic risks have been thoroughly investigated. The proposed action is not anticipated to compound or increase seismic or other geological impacts in the area.

Response 035-54

1. Potential seismic impacts at other landfill sites would not be compounded by any potential seismic related risks or development at the subject site.

Response 035-55

1. An in-depth analysis of the potential of related projects to contaminate ground water is beyond the scope of an EIR/EIS. The Supplement (Sections 5.2 and 5.3), does however, detail hydrogeologic conditions at the site and in the vicinity of the Cargill wells.

Response 035-56

1. The potential of flood and/or erosion impacts from other landfills would not be compounded by the development of the proposed site.

Response 035-57

1. See Response 035-26.

Response 035-58

1. As stated in the Draft EIR/EIS, potential impacts associated with the Hidden Valley and Broadwell Basin Residual Repositories and the Ward Valley Disposal Facility would be site-specific. Due to the nature of the materials that would be deposited at these facilities, litter and disease vectors would not be an operational consideration. Therefore, as stated in the Draft EIR/EIS, there would not be cumulative impacts associated with their implementation.

Response 035-59

1. As stated in Response 035-32, Rail•Cycle trains would not travel east of the Bolo Station site and therefore, would not impact CLC employees.

Response 035-60

1. The proposed action's potential to result in cumulative impacts was discussed in Chapter 6.0 of the Draft EIR/EIS. The proposed action would not result in individually or cumulatively significant impacts on areas proposed for protection under the California Desert Protection Act.

2. The proposed action does not lie within any areas being considered for special designation under the proposed California Desert Protection Act. The closest areas to the project site being proposed for protection are the Marble Mountains Wilderness Area (four miles to the north) and Sheephole/Cadiz Wilderness (four miles to the south). The proposed Old Woman Mountains Wilderness Area is located approximately 16 miles to the west of the project. The proposed Bristol Mountains Wilderness Area is located approximately 16 miles to the north of the project. The above wilderness areas, as well as other special management areas in the CDCA (in the general area of the proposed action) were shown in Figures 4.14.1, 4.14.2, and 4.14.3, and are discussed in Sections 4.14.1.2.1 and 5.14.1.1.3 of the Draft EIR/EIS.

3. The proposed action would have no impact on lands proposed for protection under the California Desert Protection Act. This determination is based on information about the proposed action's potential environmental effects detailed in the Draft EIR/EIS, which, with respect to the proposed wilderness areas, become less significant by the distance of the proposed project site from these lands, as well as specific language in California Desert Protection Act which states:

   > "The Congress does not intend for the designation of Wilderness Areas in . . . this Act to lead to the creation of protective perimeters or buffer zones around any such Wilderness Area. The fact that nonwilderness activities or uses can be seen or heard from areas within a wilderness area shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area" (Section 105, January 1993).

4. With regard to areas not included in the California Desert Protection Act which may previously have been considered for Wilderness designation (including the former Ship Mountains Wilderness Study Area, which covers a portion of the Cadiz Valley Alternative Site), California Desert Protection Act states:

   > "The Congress hereby finds and directs that lands in the California Desert Conservation Area, of the Bureau of Land Management, not designated as Wilderness or Wilderness Study Areas by this Act, have been adequately studied for Wilderness designation pursuant to Section 603 of the Federal Land Policy and Management Act of 1976 (90 Stat. 2743 43 U.S.C. 1701 et seq.) and are no longer subject to the requirements of Section 603(c) of the Federal Land Policy and Management Act of 1976 pertaining to the management of Wilderness Study Areas in a manner that does not impair the suitability of such areas for preservation as wilderness" (Section 108).

5. Therefore, neither the proposed action nor its alternatives would have an adverse impact on lands being considered for protection under the proposed California Desert Protection Act.

Response 035-61

1. The information on the potential CLC expansion contained in the Draft EIR/EIS was provided by the County Planning Department. This comment indicates that the impacts described in the Draft EIR/EIS may be somewhat overstated, due to a potential discrepancy in the number of permanent and seasonal employees. However, the difference in the number of employees would not substantially change the basic findings that were presented in the Draft EIR/EIS.

Response 035-62

1. Mitigation measures are identified in the EIR/EIS (see Table S.2) to lessen the extent of identified potential significant impacts. The analysis of cumulative impacts presented in the Draft EIR/EIS identified PM_{10} emissions, and additional demand

for facilities and services that would result from an increase in population as potentially significant cumulative impacts. The potential for such impacts also were identified as resulting from the proposed project alone. Therefore, the mitigations for the proposed project alone also would act to mitigate the identified significant cumulative impacts.

Response 035-63

1. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to the communities in southern California, after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve the communities in southern California. The proposed action would meet that need by helping satisfy the requirements of AB 939 for cities and counties to provide environmentally safe landfill disposal to solid waste that cannot otherwise be feasibly reduced at the source, recycled or composted.

2. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be postrecycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action.

Response 035-64

1. The Eagle Mountain project has been delayed by litigation concerning the adequacy of its EIS/EIR. With regard to that document's conclusions about the significance of project impacts and effect of proposed mitigation measures, it is important to note that the Eagle Mountain EIS/EIR may have applied different thresholds of significance than those used for this proposed Bolo Station Landfill project.

2. The analysis employed in the EIR/EIS for the Bolo Station Landfill utilized generally accepted, conservative thresholds of significance for the purposes of evaluating the proposed action's environmental effects. These standards were outlined at the beginning of each potential impact category in Chapter 5.0 of the Draft EIR/EIS. Given the potential for differing thresholds, and questions regarding the adequacy of the Eagle Mountain EIS/EIR, it is inappropriate to attempt to compare the conclusions made in the two documents.

3. The alternative site selection analysis employed for this EIR/EIS found that the Eagle Mountain site was not a feasible alternative, because it failed to meet basic siting and operational criteria deemed essential to successful operation of a rail-haul landfill. A major determining factor is that, because Eagle Mountain is actively being proposed for a similar project by a different applicant, the land could not be expected to be available to Rail•Cycle for development of a landfill.

4. Nevertheless, Chapter 2.0 of the Supplement discussed that, even with full implementation of AB 939 diversion requirements and construction and operation of the proposed Bolo Station Landfill, a long-term need will remain for additional landfill disposal capacity to serve southern California. The proposed project is only a part of the region's solution to the ongoing and increasing need for solid waste disposal capacity. The long-term disposal capacity shortfall that would remain following implementation of the proposed project could be met by another similar facility such as that proposed at Eagle Mountain.

Response 035-65

1. Potential alternative sites were evaluated based on their ability to meet basic siting and operational criteria. For a clarified discussion of the alternative site selection process, see Chapter 2.0 of the Supplement. This analysis found that lands within Los Angeles County did not meet the siting and operational criteria necessary for successful, environmentally safe implementation of a rail-haul landfill.

Response 035-66

1. For a clarified discussion of project alternatives, see Chapter 2.0 of the Supplement. This analysis evaluated alternative sites' ability to meet basic

project objectives with reduced significant environmental effects, as compared to the proposed site.

Response 035-67

1. Access to the Cadiz Valley Alternative site would be achieved via the Cadiz Road and the Arizona-California Railroad, as indicated in Figure 3.17 of the Draft EIR/EIS. Use of Cadiz Road for access to the Cadiz Valley Alternative Site is also discussed in the Draft EIR/EIS in Section 5.12. Cadiz Road and the railroad are available for access to the alternative site.

2. Implementation of this alternative would require the purchase of Section 17 from CLC. It is assumed that this land would be available for purchase at fair market value. If this land were not available for sale at a reasonable price, the County could make a determination of infeasibility for this alternative. Because the Draft EIR/EIS found that the Cadiz Valley Alternative site was not environmentally preferable to the proposed site, the County does not need to consider whether it is feasible for Rail•Cycle to acquire Section 17.

Response 035-68

1. Additional information was included in the Supplement in lieu of recirculation or revision of the Draft EIR/EIS.

Bureau of Land Management
Draft EIR/EIS Rail-Cycle Bolo Station Landfill
February 8, 1993 Public Hearing comments presented by
George Rice, Chief Operating Officer, Cadiz Land Company, Inc.

1. My name is George Rice, I am the Chief Operating Office of Cadiz Land Company. Cadiz Land Company is publically traded - over the counter - on the NASD and draws capital from both domestic and international financial markets including institutions and pension funds.

2. The proposed Bolo Landfill threatens a viable economic enterprise i.e. the Cadiz Land Company's premier quality table grape and citrus farming operations. Cadiz Land Company owns 26,000 acres (42 square miles) of land literally next door to (one mile from) the proposed Bolo Landfill site. Of this 26,000 acres, 800 acres are producing grape vineyards and 640 acres have been planted to selected varieties of desert citrus. As I speak to you tonight, we are currently completing our first commercial citrus harvest at our Cadiz project.

3. As an officer of this public Company, I have a fiduciary responsibility to protect the investment of our shareholders' in this unique agricultural operation. Preserving the quality of our water supply and the pristine desert environment is critical to the integrity and future of our shareholders' investment.

4. Our Company has farmed premium quality table grapes and citrus at this location for the past 8 years. Our shareholders have invested tens of millions of dollars. We seasonally employ hundreds of people and generate millions of dollars annually in crop value. We propose, and applications are now being processed by the County of San Bernardino, to expand this agricultural operation to include 9,600 planted acres. This additional investment will likely total more than $50 million dollars and will employ thousands of seasonal and full-time workers.

5. To conclude, we are outraged by the audacity of the proponents of this waste dump. A waste dump site located immediatly adjacent to a food production operation is not compatible. ① The draft Environmental Impact Report and Environmental Impact Study presented by the proponents of this project clearly admits "Significant and Unavoidable Adverse Impacts" to our ground water and air quality. ② Railcycle proponents have never communicated with senior Cadiz Land Company officials and their draft Environmental Impact Report and Environmental Impact Study does not address the impact of the proposed landfill on our farming operations. ③ This tactic represents either unparalleled arrogance or intentional deception. If this proposed land exchange and solid waste operation is allowed to proceed, it seriously threatens the economic viability of Cadiz Land Company's existing operations and plans for future development. ④ Cadiz Land Company strongly recommends that this dumpsite be located elsewhere.

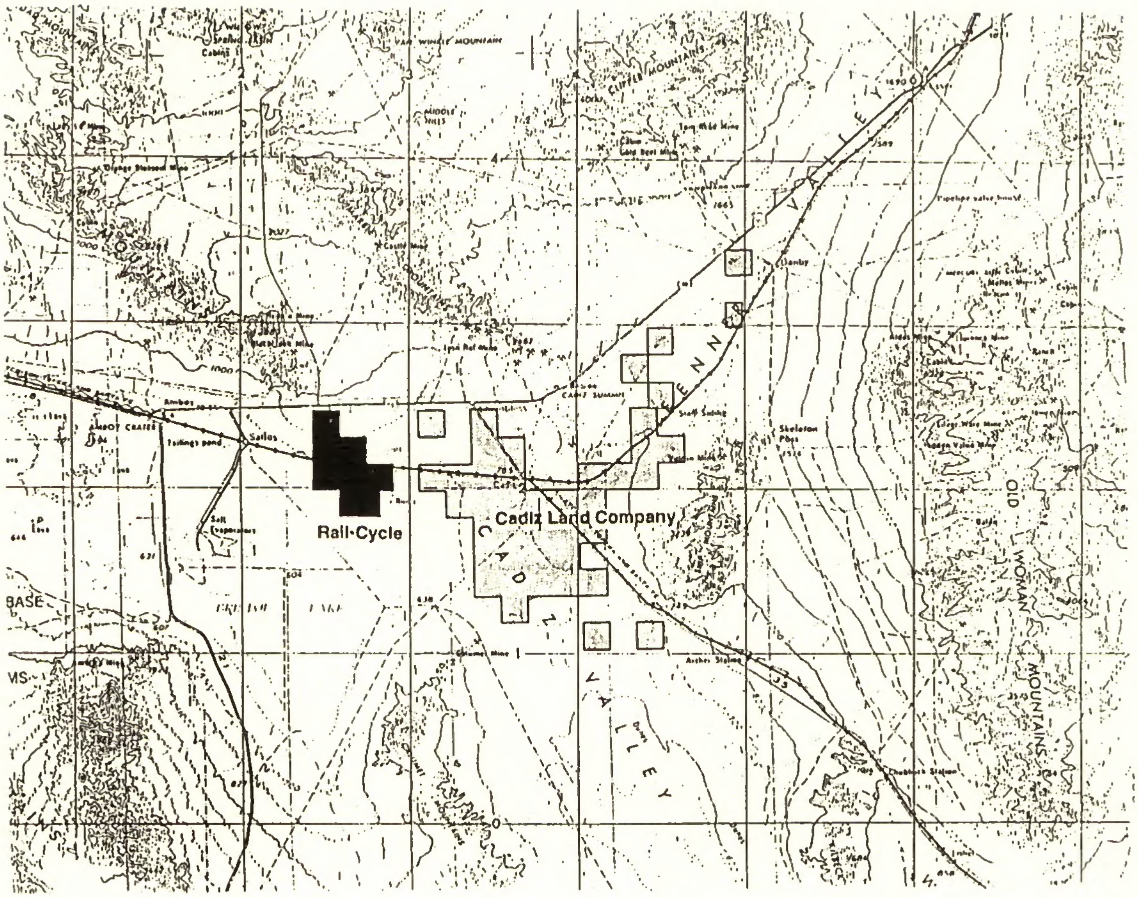
Resume of

George P. Rice

Mr. George Rice holds the positions of Chief Operating Officer and Chief Financial Officer for Cadiz Land Company, Inc., a publicly traded Delaware corporation. In this capacity Mr. Rice is the senior management official with direct responsibility for Cadiz Land Company's agricultural operations in Cadiz, California.

Mr. Rice was named the Chief Financial Officer of Pacific Agricultural Services, Inc. (a predecessor by merger to Cadiz Land Company, Inc.) in April, 1988. Mr. Rice was appointed Secretary of the Company in December, 1990, and was appointed as a Director of the Company in May, 1991. In December, 1991, Mr. Rice was also appointed Chief Operating Officer. Before joining Cadiz Land Company, Mr. Rice had been the Chief Financial Officer of H.P. Metzler & Sons since 1980. From 1973 to 1980, Mr. Rice practiced public accounting with the international accounting firm of Arthur Young & Company. Mr. Rice holds a Bachelors of Science degree from California State University, San Jose, he is a California Certified Public Accountant, and is a member of the American Institute of Certified Public Accountants and the California Society of Certified Public Accountants.

GR/rv/524


Rail·Cycle
Cadiz Land Company
CADIZ VALLEY
FENNER VALLEY
OLD WOMAN MOUNTAINS
CLIPPER MOUNTAINS
SHIP MOUNTAINS
Amboy
AMBOY CRATER
Saltus
Tailings pond
Salt evaporators
CADIZ SUMMIT
Cadiz
Danby
Skeleton Pks
Archer Siding
Chubbuck Station
BASE
MS
Milligan

DOCUMENT 036
GEORGE P. RICE, CADIZ LAND COMPANY, INC.
SUBMITTED AT BLM PUBLIC HEARING
FEBRUARY 8, 1993
RESPONSE TO COMMENTS

Response 036-1

1. This comment addresses similar issues raised in Comment 035-1. See Response 035-1.

Response 036-2

1. This comment addresses similar issues raised in Comment 035-3. See Response 035-3.

Response 036-3

1. This comment addresses similar issues raised in Comment 035-2. See Response 035-2.

Response 036-4

1. This comment addresses similar issues raised in Comment 035-2. See Response 035-2.

BUREAU OF LAND MANAGEMENT, DRAFT EIR/EIS RAIL CYCLE BOLO STATION LANDFILL - FEBRUARY 10, 1993 PUBLIC HEARING COMMENTS PRESENTED BY LOUIS E. GONZALEZ - MANAGER OF FARMING OPERATIONS - CADIZ LAND COMPANY, INC.

My name is Louis E. Gonzalez, I am Manager of Farming Operations at Cadiz Land Company. We currently farm 1440 acres of grapes and citrus. Cadiz Land Company plans to expand it's agricultural operation to a total of 9,600 planted acres. Cadiz Land Company currently owns 26,000 acres, (42 sections) of land literally next door or one mile from the proposed waste dump site. We believe the Draft EIR does not address the impacts of this proposed waste dump on our farming operation. ①

Our farm property lies in the remarkably fertile Cadiz Valley which has a unique micro-climate situated in the high desert. Preserving the environmental quality of this pristine valley is critical to our current farming operations and plans for future expansion. This agricultural project is a unique operation. The quality of our water supply and our very fertile soils enables us to produce superior quality food products. Cadiz Land Company has demonstrated that it can grow premium quality fruits in the Cadiz Valley. Our table grapes have reached not only the United States' No. 1 standards, but also Export grade and Export Extra Fancy grades and have been shipped domestically and exported all over the world. We are currently only growing citrus and grapes on a commercial basis, but many trials are underway to diversify and specialize in crops that can not be grown anywhere else but in a desert micro-climate, like we have here in Cadiz. We are just beginning to tap the agricultural potential in the Cadiz Valley. It is an absolute tragedy that our pest free fields could be infested with rodents, insects and birds and further infected with air-borne diseases as a result of this waste dump. Have these issues been addressed? ②

In our farming practices at the Cadiz agricultural project, we use very minimal pesticides. Because of strict EPA regulations, all materials used in farming operations carry an EPA number, but as far as "real pesticides" go, their use in Cadiz is non-existent. This has allowed us to apply for organic growing permits. We are currently growing organic raisins and have been asked to grow organic citrus in the near future. We can forget about doing this if this waste dump is allowed. ③ We have adopted many cultural practices designed to protect our natural environment and we routinely take precautions to prevent any vector or virus from entering our fields. For example we wash and disinfect all farming equipment and we bleach hand tools that are used in cutting or pruning to prevent the spread of virus and diseases.

Abundant high quality ground water is available for agricultural and domestic use. Water quality is "very good" with reported total dissolved solids concentrations in the range of 200 mg/l. We currently have five (5) agricultural wells on the property. Each well supplies approximately 2000 gallons per minute. All crops are irrigated by a fully automated, state of the art, drip or micro-sprinkler system which can deliver a 97%

efficiency factor eliminating the possibility of wasting any water.

In conclusion, a solid waste operation located next to food production is not compatible under any circumstances. ④ The proposed waste dump would be devastating to our farming operation. The draft EIR documents certain impacts to our groundwater and air quality, but it fails to identify many other significant impacts to agriculture such as earthquakes, flood and erosion hazards. ⑤ If this land transfer and waste proposal is allowed to proceed it will have significant adverse environmental impacts that will devastate the viability of our present and future agricultural operations. ⑥ We should all remember that Farming has been the backbone of America for hundreds of years. Lets not have this waste dump change that.

LEG/leb/519

RESUME OF
LOUIS E. GONZALEZ

Louis E. González holds the position of Farm Manager of Cadiz Land Company, Inc., In his capacity Mr. González is directly responsible for all activities that take palace in the field from planting to harvest. Mr. González was named to this position for Pacific Agricultural Holdings, Inc. (A predecessor by merger to Cadiz Land Company, Inc.) in February 1990.

Before joining Cadiz Land Company, Inc., Mr. Gonzalez was Production Manager for Cy Mouradick and Sons, one of the pioneer farming operations in the Coachella Valley, from 1984 until 1990. From 1982 to 1984 he worked for Victor Packing, a Raisin and wine grape operation in the San Joaquin Valley. Mr. González holds a Plant Science degree from California State University, Fresno and a minor in Agribusiness, he is a member of the Desert Grape Growers Association, American Society for Horticultural Science and a Board Member of the Viticulture and Enology Research Center at C.S.U.F.

29
Palms

LEG/leb/518

DOCUMENT 037
LOUIS E. GONZALEZ, CADIZ LAND COMPANY, INC. SUBMITTED AT BLM PUBLIC HEARING
FEBRUARY 10, 1993
RESPONSE TO COMMENTS

Response 037-1

1. This comment addresses similar issues raised in Comment 035-2. See Response 035-2.

Response 037-2

1. This comment addresses similar issues raised in Comment 035-26. See Response 035-26.

Response 037-3

1. This comment addresses similar issues raised in Comment 035-2. See Response 035-2.

Response 037-4

1. This comment addresses similar issues raised in Comment 035-1. See Response 035-1.

Response 037-5

1. This comment addresses similar issues raised in Comments 035-6 and 035-25. See Responses 035-6 and 035-25.

2. Supplemental information and analyses regarding the project's potential seismic and flood impacts, were provided in Chapters 4.0 and 5.0 of the Supplement.

Response 037-6

1. This comment addresses similar issues raised in Comment 035-2. See Response 035-2.

I. My name is Ted Dutton. I am vice president of development for the Cadiz Development Company which owns 26,000 acres of property next to the proposed rail cycle dump. Our property is larger than many cities in Southern California. I have been a resident for over 25 years in San Bernardino County. I have been active in community and civic affairs and the land development business.

II. I have never read a document as flawed as the Rail-Cycle EIR/EIS. Many other speakers have addressed numerous shortcomings. A member of the County of San Bernardino Solid Waste Advisory Task Force and recognized expert in solid waste, Mr. Peter Burke, stated in the public record that this document is more flawed than any other he had previously read.

III. A critical concern is the document's failure to address the cumulative effects of the waste facilities proposed in the immediate area. This includes: ①

1. Vulcan Mine hazardous waste site
2. Hidden Valley hazardous waste site
3. Broadwell Lake hazardous waste site
4. this Rail-Cycle solid waste site
5. and, the Ward Valley low-level radio-active waste site.

A "waste corridor" is proposed. Today this area is a pristine desert with an abundant high quality groundwater supply. Can anyone claim that the cumulative environmental effects of these proposals have been adequately addressed? The answer is NO!

IV. In conclusion, Cadiz Development urges this body to not accept the draft EIR/EIS as adequate and to direct the trash dump proponents to:

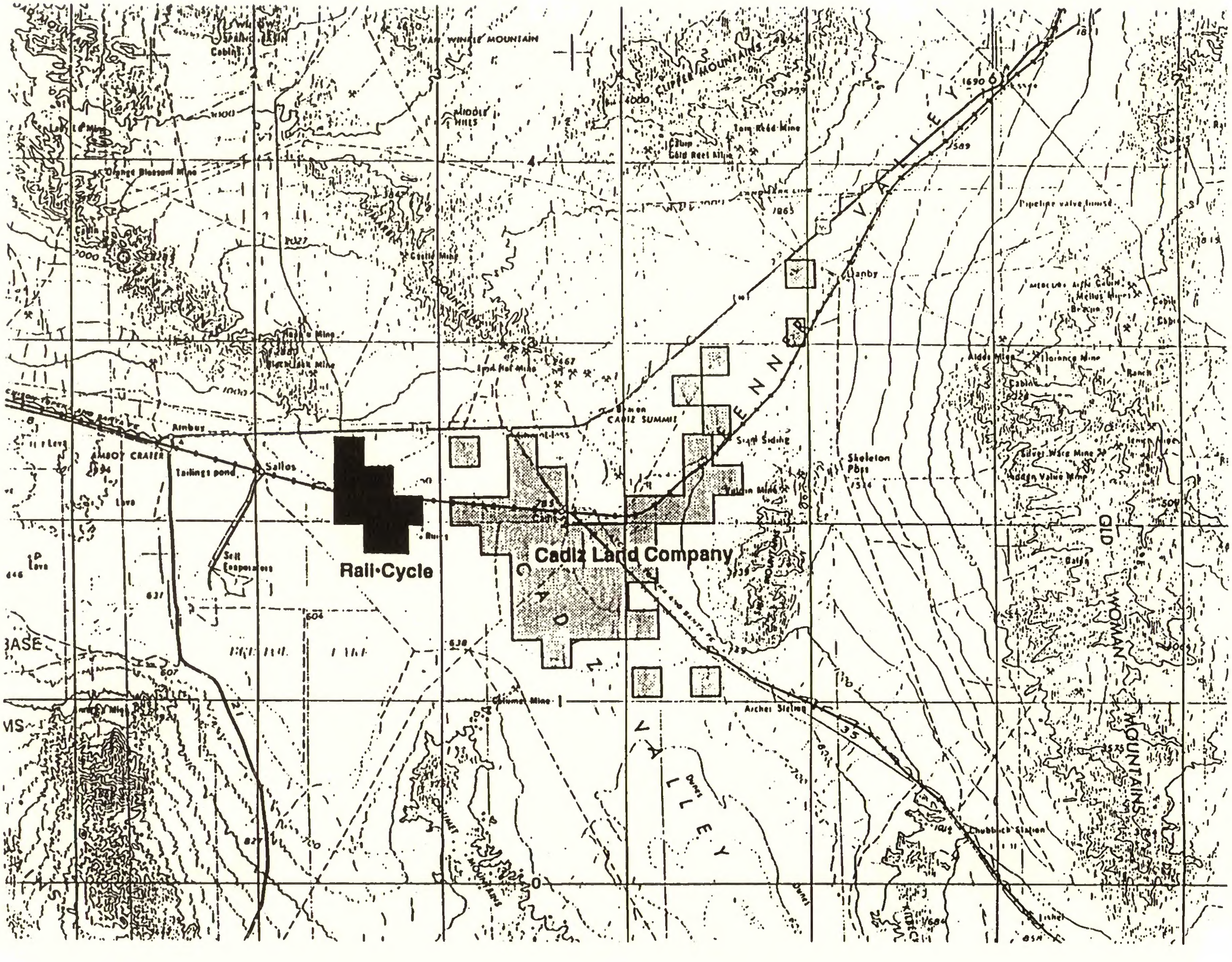
1. Provide a more comprehensive evaluation of project alternatives. ②
2. Provide a better analysis of the project's effects on the existing commercial enterprises in the area: Leslie Salt and Cadiz Agricultural operation. ③
3. Provide a better analysis of cumulative effects of the neighboring waste facilities now being considered for approval. ④

V. This EIR only pays lip service to issues and pretends to address 9600 acres of proposed agriculture. CEQA obligates this dump site operation to identify and address the effects. Just plain and simple, this EIR is inadequate.

Our company will submit detailed comments to the County of San Bernardino.

TED W. DUTTON

Ted Dutton is Vice President of Development for Cadiz Land Company. Mr. Dutton has been involved in asset management, property management and development throughout San Bernardino County for many years. He is a resident of Lake Arrowhead and has lived in San Bernardino County for over twenty-five years. Active throughout San Bernardino County in business, civic, charitable and political affairs, Mr. Dutton was appointed by Governor Wilson to Chair the State of California Employment Training Panel. He also Chairs the San Bernardino County Private Industry Council and serves on numerous Boards of Directors. He is Past President/Past Chairman of the Baldy View Building Industry Association, the Inland Empire Economic Council and the Ontario Chamber of Commerce.


Rail·Cycle
Cadiz Land Company
CLIPPER MOUNTAINS
VAN WINKLE MOUNTAIN
MIDDLE HILLS
Tom Reed Mine
Gold Reef Mine
Orange Blossom Mine
Amboy
AMBOY CRATER
Tailings pond
Saltus
Salt Evaporators
CADIZ SUMMIT
Siam Siding
Cadiz
Skeleton Pass
Danby
Pipeline valve house
Florence Mine
Silver Wave Mine
Hidden Value Mine
OLD WOMAN MOUNTAINS
FENNER VALLEY
CADIZ VALLEY
Archer Siding
Chubbuck Station
Calumet Mine
Dunes
IRON MOUNTAINS
SHIP MOUNTAINS
BASE
35

DOCUMENT 038
TED W. DUTTON, CADIZ DEVELOPMENT COMPANY
SUBMITTED AT BLM PUBLIC HEARING - FEBRUARY 11, 1993
RESPONSE TO COMMENTS

Response 038-1

I. The cumulative impacts of the projects referenced in this comment were included in Chapter 6.0 of the Draft EIR/EIS. A clarification of cumulative impacts was also included in the Supplement (Chapter 6.0) based on updated information and a revised status of some of the cumulative projects included in the Draft EIR/EIS (i.e., America Mine and Vulcan Mine).

Response 038-2

I. CEQA and NEPA provide for the discussion of a "reasonable range" of alternatives. The discussion need not be exhaustive but rather is intended to provide adequate information for a comparative analysis of potential impacts. A clarified discussion of project alternatives was included in Chapter 3.0 of the Supplement.

Response 038-3

I. CEQA and NEPA require that an EIR/EIS evaluate a project's physical effects on the environment. The environmental effects of the proposed action which might affect the Cargill and CLC's operations were discussed throughout the Draft EIR/EIS, and in particular in Sections 5.3, 5.4, 5.7, 5.8, 5.12, 5.13, and 5.14. Refined and clarified analysis was included in Chapter 5.0 of the Supplement.

Response 038-4

I. As presented in Table 6.1 of the Draft EIR/EIS, the following landfill/waste treatment facilities are being proposed within the study region of the Bolo Station Landfill:

- Broadwell Basin Hazardous Waste Residuals Repository
- Hidden Valley Residual Repository
- Ward Valley Low-Level Radioactive Waste Facility
- Eagle Mountain Landfill

The discussion of the proposed project's cumulative impacts, provided in Chapter 6.0 of the Draft EIR/EIS considers the effect of development of these projects along with the proposed action. As stated in Response 038-1, the Supplement provided an updated analysis of cumulative impacts.

CARGILL
SALT DIVISION

7200 Central Ave.
Newark, CA 94560-4206
510/797-1820 1-800-321-1458
Admin FAX: 510/790-8162
Plant FAX: 510/790-8189

March 1, 1993

Mr. Randy Scott
Senior Planner
Environmental Team
County of San Bernardino, Planning Department
385 N. Arrowhead Ave., Third Floor
San Bernardino, CA 92415-0182

Mr. Doug Romoli
Bureau of Land Management
California Desert District
6221 Box Springs Blvd.
Riverside, CA 92507-0714

Re: Comments on Draft EIR/EIS Rail*Cycle Bolo Station Landfill, San Bernardino County, California

Dear Mr. Scott and Mr. Romoli:

Cargill Salt's review of the Draft EIR/EIS for the proposed Rail*Cycle mega-landfill has identified a number of serious technical and procedural flaws that demonstrate the document is both inadequate and incomplete. The Draft EIR/EIS contains a number of factual errors, fails to address significant issues and is notable for a lack of baseline environmental data on which to adequately assess the impacts. As a result of these failings, we believe the Draft EIR/EIS has seriously underestimated the extent and significance of the impacts associated with this project, particularly the impact on existing mineral production adjacent to the proposed project.

The two most important issues that need to be addressed further to adequately assess impacts and to protect the area's mineral resources are the potential for contamination and the potential to cut off groundwater flows from the Fenner Valley to Cargill Salt's brine wells. Once these are considered properly, it will demonstrate clearly that the landfill needs to be moved from this location.

As a starting point, the DEIR/EIS fails to identify the fact that the mineral-rich brines extracted fewer than 400 yards away from the proposed mega-landfill are destined for human consumption. This is a major gap in the information base of the Rail*Cycle DEIR/EIS. Based on incomplete and inaccurate geological data, the DEIR/EIS concludes that impacts to existing and anticipated economic uses of the area's mineral resources are not significant impacts. We disagree. ①

We believe the landfill, as currently proposed, poses a significant risk to the continued viability of our operation and to any other economic use of the area's important mineral resources.

These concerns are based on an extensive review by Mr. Morris Balderman, a consulting geologist. Mr. Balderman is a certified engineering geologist in the State of California with extensive background and experience in hydrogeologic and geotechnical characterization and site selection studies for waste disposal. I have attached Mr. Balderman's comments, which were submitted to the Regional Water Quality Control Board, to be incorporated into the record along with Cargill Salt's comments.

Cargill Salt Amboy Facility Description

Cargill Salt's Amboy facility produces food and industrial products from brines pumped from three wells located fewer than 400 yards from the proposed landfill. The mineral-rich brines extracted from these wells are further concentrated through solar evaporation. The brines of Bristol Lake are unique in containing naturally high concentrations of calcium chloride. Nearby Cadiz Lake is the only other lake in the region reported to have brines of similar composition.

The wells, EW-3, EW-4 and EW-5 are about 300 feet deep and produce brine from about a 270-foot depth. The wells are located near the margin of the dry lake bed and have proven most suitable for brine production. Suitable well sites are limited to a fairly small area where adequate groundwater flows, confined mineralization layers and a fragile geologic transition zone converge. Test wells have been drilled at other locations at the margin of the Bristol Dry Lake Bed but did not yield sufficient brine. In other words, we cannot simply move our wells to another location if the Rail*Cycle project is approved and we discover that the landfill is contaminating our brine source or choking off the flow of brine.

More than 70 percent of Cargill's production of calcium chloride and sodium chloride comes from these wells. Calcium chloride, Cargill Salt's principal product line, is used for both food and industrial purposes.

The following comments refer to specific errors or inadequacies in the data or evaluation of impacts as summarized in Table 1.1 of the DEIR/EIS "Summary of Impacts, Mitigation Measures, and Unavoidable Adverse Impacts."

Geology and Soils

The DEIR/EIS has failed to adequately assess the hydrogeologic and geotechnical issues associated with liners and, as a result, the potential for contamination of the mineral resources on which Cargill Salt depends. Because Cargill Salt produces a food-grade product, the potential for contamination of the brine source is a very serious issue for the company. The brine extraction process Cargill Salt employs creates a cone of depression directly under the proposed landfill which could enable leakage from the landfill to flow directly into the brine production wells. ②

The DEIR/EIS and background technical reports indicate several issues related to liner stability that have not been resolved, suggesting a greater potential for leaks than is typically expected at a modern landfill.

Seismic Hazards

- The evaluations of seismic effects have not adequately considered ground conditions in the part of the landfill closest to the brine wells. If a large earthquake were to occur, greater than expected seismic deformations could damage the landfill liner and lead to contamination. ③
- Surface fissures on the lake bed projecting toward and adjacent to the proposed landfill may indicate the potential for damage to the liner from foundation settlement or tectonic movements. ④
- Additional investigations are needed to determine the significance of the buried fault (identified from geophysical surveys) adjacent to the proposed landfill in the area of the existing wells. This fault is along the projection of a 20-mile-long fault zone that has been suggested to be capable of a magnitude 7.0 earthquake. ⑤

Subsidence/Collapsible and Expansive Soils

- Settlement has been underestimated in soils beneath the landfill. The potential for differential settlement has been ignored. Because of these inadequacies, impacts from settlement have not been properly assessed, in particular, the impact on liner failure and on groundwater flows. Consolidation of the soft soils below the southwestern part of the landfill could act as an obstacle to recharge patterns of the lake bed and interrupt historic groundwater flows. The landfill is proposed to be located directly in the path of the primary groundwater flow serving Cargill Salt's brine extraction wells. This groundwater flow originates in the Fenner Valley and flows in a southwesterly direction to this segment of the Bristol Dry Lake Basin. ⑥

Mineral Resources

Brines

- The potential for contamination of the brines, although understated, is identified in the DEIR/EIS, but the proposed mitigation measures are totally unacceptable. The DEIR/EIS proposes to pay for additional purification of the brines through an unidentified and untested treatment technique. This will not work. No one from the project has consulted Cargill Salt, the affected party, on this concept. Cargill Salt produces products that are destined for human consumption. In the food industry, the mere suggestion that Cargill Salt's product had been tainted could be enough to cost the company its market share. ⑦

- Additionally, there is no detail provided as to how the financial assurance program and compensation would work. Who would determine the extent of the loss and appropriate compensation? The financial assurance segment, as written, does not address compensation in the event Cargill Salt is unable to market its products due to contamination and thus is forced out of business. ⑧
- One of the proposed corrective actions -- pumping the contaminated groundwater to the surface -- may further exacerbate the resource problems created by the Rail*Cycle project. ⑨
- Finally, the mineral resources element does not even address the potential for restriction of flow to Cargill Salt's wells caused by settlement from the landfill cutting off the brine supply. The issue of flow restriction was completely ignored in the DEIR/EIS. The wells are located on a fragile geologic zone that allows the trickle of highly concentrated brine to mix with flows of alluvial waters to create enough pumpable fluid. If these flows are restricted by settlement from the landfill, all access to the area's mineral resources will have been cut off. ⑩
- The impacts to brines have not been identified properly, and the proposed mitigation measures are not acceptable. For the record, Cargill Salt will not accept treated water from Rail*Cycle as currently proposed. The mitigation measure proposed to clean up the brine is not feasible and will not reduce impacts. ⑪

Other Potential Minerals

- The mineral resource evaluation performed to date is inadequate. First, the wells drilled to determine the presence and extent of local resources were not deep enough. The depth reached in the Rail*Cycle investigation was only 200 feet, which is 100 feet short of known resources immediately adjacent to the site. If Cargill Salt is extracting mineral-rich brines from 300-foot wells immediately adjacent, why would Rail*Cycle investigations not drill at least that deep? BLM now has required Rail*Cycle to conduct additional exploration to determine the mineral resources. The fact that this issue has not been addressed properly makes the DEIR/EIS incomplete and inadequate. ⑫

Hydrology

Drainage

- The impact from impairment of historic surface water flows directly up gradient of Cargill Salt's brine wells still needs to be assessed. This surface water can percolate into the ground to sustain the brine flow on which Cargill Salt relies. This impact has not been addressed in the DEIR/EIS. ⑬

Groundwater Supply

- The investigation to determine the impact on brine production wells from the extraction of an additional 75 acre feet of water annually was improperly performed and is therefore invalid, resulting in an incomplete analysis. The attachment from Mr. Balderman discusses this issue in more detail. ⑭

Groundwater Impairment

- Again, the geotechnical investigation upon which this analysis is based is inadequate and incomplete, particularly as it relates to the seismic and settlement issues referenced previously. ⑮

Air Quality

Dust suppression in arid, high temperature, low humidity environments is difficult at best. Water is a very poor choice for a desert environment such as that found at Bristol Lake. To be effective, copious quantities of water, a resource that is in limited supply, must be applied at frequent intervals to compensate for rapid evaporation. ⑯

Transportation

No impact analysis was performed on the increase in railroad traffic (up to 14 times per day) that will be generated by the project. The increased traffic could impede employee and customer access to the Cargill Salt facility. This also is a safety issue as there currently is not a protective crossing at the site. ⑰

Land Use

Under the land-use category, the DEIR/EIS identifies two significant, unavoidable adverse impacts. The current classifications at the site under both the California Desert Conservation Plan and the County General Plan do not allow the construction of a mega-landfill. Under the DEIR/EIS siting criteria, this site should have been eliminated from further consideration early in the site-selection process. ⑱

According to county policies, prior to approving or recommending approval of a General Plan land-use district change, the planning agency must find that other existing and permitted uses will not be compromised; the proposed land-use district is consistent with the goals and policies of the General Plan, and that the proposed land-use district change will not have a substantial adverse effect on surrounding property. ⑲

The proposed Rail*Cycle mega-landfill clearly does not meet any of these tests.

Among the stated goals of both land-use plans is a desire to protect and preserve mineral resources for beneficial uses and to ensure that new project proposals are compatible with existing uses of adjacent property. Even the applicants' own siting criteria includes compatibility with surrounding land uses and future land-use designations. ⑳

These are appropriate and laudable goals for reasons stated in the Natural Resources section of the San Bernardino County General Plan:

> "While most land uses have options to site development, mineral extraction is limited to sites where minerals naturally occur....Mineral resources should be protected and managed, or they will be lost due to the encroachment of incompatible land uses."

The proposed landfill clearly is not compatible with an adjacent use that relies on the quality and quantity of existing mineral resources to produce a food-grade product. Cargill Salt is the single largest producer of calcium chloride in the state and the only producer of liquid food-grade calcium chloride on the West Coast. ㉑

To ensure that mineral resources are conserved for beneficial uses and to avoid land-use conflicts between mining operations such as Cargill Salt's and incompatible land-uses, county policies require a buffer zone of a minimum of one-half mile. The proposed Rail*Cycle mega-landfill, which is located less than 400 yards from Cargill Salt's brine wells and directly over the cone of depression created by those wells, does not meet even this minimum requirement. Given the nature of Cargill Salt's operations, we do not believe even this half-mile minimum requirement would be adequate. ㉒

The problems associated with locating a project of this nature, scale and size at this particular location are insurmountable.

Land Exchange

The proposed land exchange between the Bureau of Land Management and the project applicants may lead to the loss to the public of valuable, irreplaceable mineral resources. These resources have not been evaluated properly, making this section of the DEIR/EIS inadequate and incomplete. ㉓

Site Selection Process

The site selection process is inadequate and incomplete. If the process had been performed properly, this particular site would have been eliminated early on in the site-selection process. However, the process used by Rail*Cycle did not follow the standard procedures typically used for a project of this scale. A site-selection process typically: ㉔

1. Defines the total area available.
2. Excludes lands that are unavailable for use, e.g. lands with environmental concerns or lands that are used for military research.
3. Ranks the options using factors such as economics and convenience issues such as land ownership, haul distance, difficulty of site development or need to upgrade roads.

Rail*Cycle, however, does not appear to have done a thorough regional survey to identify alternatives. Large areas were excluded improperly, mostly because the railroad does not own the land. ㉕

In addition, the alternative site presented in the DEIR/EIS had unacceptable environmental conditions, which meant that is was not really a viable option, skewing the evaluation. The evaluation of alternatives sites is an important part of the DEIR/EIS, and it can't be considered complete unless properly performed. The large areas that were excluded from consideration may well contain sites more suitable for a mega-landfill. ㉖

As a result of this seriously flawed site-selection and alternatives analysis process, the DEIR/EIS gives the inaccurate impression that impacts at this location are needed in order to realize the benefits of the project. We strongly advise that the site location be reconsidered to avoid impacting important mineral resources and existing beneficial uses of those resources. ㉗

Finally, I have enclosed a list of specific errors in the DEIR/EIS, a copy of Mr. Morris Balderman's comments on the DEIR/EIS and background documents, and a table summarizing Cargill's comments on critical aspects of the DEIR/EIS.

Thank you for your attention to these comments. Please feel free to contact me if you have questions about the issues I have raised.

Sincerely,

Barbara N. Ransom
Environmental Manager

BNR:nw

Attachments

BNR\RAILCYCL.393

ATTACHMENT I

CARGILL SUMMARY OF IMPACTS, MITIGATION MEASURES AND UNAVOIDABLE ADVERSE IMPACT

Environmental Issues	Cargill Comments	Potential Impacts
• Geology & Soils	Inadequate & incomplete investigation of geology. RailCycle did not drill deep enough or drill enough wells to properly investigate soil conditions below landfill.	Liner failure & contamination of mineral resource destined for human consumption.
• Seismic Hazards	Inadequate investigation of buried fault, surface fissure and seismic effects.	Liner failure & contamination of mineral resource destined for human consumption.
• Subsidence/Collapsible & Expansive Soils	Underestimation of settlement in soils beneath landfill. Potential differential settlement has been ignored.	Consolidation of soft soils below landfill creating an obstacle to ground water flow our wells. Differential settlement may cause liner to leak & contamination.
• Mineral Resource - Brine	Inadequate evaluation of mineral resource Mitigation proposed unacceptable Failure to address potential restriction of water flows to brine wells caused by settlement of landfill.	Loss of public mineral resource Exacerbate contamination of resource. Access to area's mineral resource cut off.
- Other Potential Minerals	Inadequate and incomplete evaluation of mineral resource. RailCycle wells only drilled to 200 feet which is 100 feet short of existing resource.	Loss of public mineral resource.

ATTACHMENT I

CARGILL SUMMARY OF IMPACTS, MITIGATION MEASURES AND UNAVOIDABLE ADVERSE IMPACT
(continued)

Environmental Issues	Cargill Comments	Potential Impacts
• Hydrology - Drainage	Inadequate assessment of impact from impairment of surface water flow to brine wells.	Loss of access to mineral resource
- Groundwater Supply	Inadequate & improper assessment of impact to brine wells from extraction of groundwater by RailCycle	Restriction of access to mineral resource.
- Groundwater Impairment	Inadequate and incomplete assessment	Contamination of mineral resource.
• Transportation	Failure to analyze impact of increase rail traffic as impediment to customer access to Cargill facility. Failure to analyze increase safety risk at unguarded crossing.	Increase risk of accidents at railroad crossing.
• Land Use	Land use designation (BLM & County) does not allow solid waste facility at this location.	Significant unavoid-impacts should require landfill to be relocated.
	Not compatible with existing uses, does not meet minimum buffer requirements.	Significant unavoidable impact - should require landfill to be relocated.

ATTACHMENT I

CARGILL SUMMARY OF IMPACTS, MITIGATION MEASURES AND UNAVOIDABLE ADVERSE IMPACT
(continued)

• Land Exchange	Inadequate and incomplete assessment of mineral resource. In order to assess value of minerals beneath landfill, BLM is requiring additional information which deems the DEIR/EIS incomplete.	Loss of valuable mineral resource to public.

ATTACHMENT 2

SPECIFIC ERRORS IN DEIR/EIS

Page 4.3-3

Calcium chloride uses are not primarily for deicing as stated in the DEIR/EIS. Calcium chloride is used for food production and industrial uses such as concrete production and oil recovery. ㉘

Page 4.3-5

Locatable Resources

The statement "No mineral production is currently undertaken at the site" is misleading. Mineral production is performed directly adjacent to the site. The next statement is wrong. "According to BLM files, evidence of significant or long term mineral resources exploration or explanation activities near the site is not present........." Cargill has been extracting calcium chloride brines 400 yards away from the proposed landfill for years. ㉙

Page 4.4-23

This table is incorrect. ㉚

Page 4.4-27

4.4.22.1

Depth to bedrock has not been confirmed by drilling. ㉛

Page 5.2-7

It is still is not clear how much separation there is between groundwater resources and the base of the landfill and, in particular, how this will be achieved in the southwest portion of the landfill. In prior RailCycle reports, RailCycle stated that the landfill would have a minimum 10 ft. separation. This issue is very important considering the estimate of 14 feet maximum settlement depths are not valid. ㉜

Page 5.2-12

Mitigation measures should also include the requirement of 3 feet of clay in addition to the new proposed double synthetic liner to ensure adequate buffer when the liner fails or leaks. ㉝

Page 5.3-6 - Mineral Resources

In the DEIR/EIS the potential loss of an unknown quantity of $CaCl_2$ and NaCl is considered an unavoidable adverse impact but not a significant one. How did the document come to this conclusion? What data is there to support this conclusion? First, we don't know how much is being lost. Second, this is only one of two natural $CaCl_2$ production areas in the state and one of three West of the Rockies. This should be considered significant. ㉞

ATTACHMENT 2

SPECIFIC ERRORS IN DEIR/EIS
(continued)

Page 5.3-6

In the DEIR/EIS, removal of access to locatable and saleable mineral resources is an unavoidable and adverse impact but again it is not considered significant. What is the factual basis for this conclusion? $CaCl_2$ is a locatable mineral but is not even addressed here. It is not "readily available at numerous location throughout the region," and therefore should be considered significant. ㉟

Page 5.4-9

For the record, Cargill Salt will not accept treated water from RailCycle as currently proposed.
The mitigation measure proposed to clear up brine are not feasible and will not reduce impacts. We will lose our markets. ㊱

MORRIS A. BALDERMAN/CONSULTING GEOLOGIST
P.O. BOX 796 - DANA POINT, CA 92629 714/240-2396 - FAX 714/240-8425

January 12, 1993

Ms. Barbara Ransom
Environmental Manager
Cargill Salt Company
7220 Central Avenue
P.O. Box 364
Newark, CA 94560-1820

Technical Review of Draft EIR/EIS
Rail•Cycle Bolo Station Landfill
San Bernardino County, California

Dear Ms. Ransom:

Following your request and authorization, I have reviewed the Draft EIR/EIS and background technical documents to evaluate whether Rail•Cycle has adequately addressed the potential effects of the proposed landfill on your existing Amboy facility. This review is a follow-up to the Preliminary Geotechnical Evaluation that I performed in June 1991. Results of that evaluation are summarized in my June 28, 1991 letter to you, which is included in Appendix A.3 of the Draft EIR/EIS.

Scope of this work has included review of the Draft EIR/EIS sections addressing geology, ground water, mineral resources, and site selection. I also reviewed related background technical reports, particularly the Phase II Geologic, Hydrogeologic and Geotechnical Site Characterization Study prepared by Jacobs Engineering Group, Inc. (Jacobs). These reviews also were based in part on my experiences in hydrogeologic and geotechnical characterizations and site-selection studies for waste-disposal facilities and other critical projects.

This report begins with a brief summary of findings. The individual topics then are discussed in greater detail, followed by conclusions and recommendations.

SUMMARY OF FINDINGS

The findings of this review can be summarized under four main topics, as follows:

1. Construction of the proposed Landfill potentially could affect production rates and quality of the brine at the existing brine wells; this potential was not addressed properly in the Draft EIR/EIS. (37)

- Constructing the landfill and placing liner over 2100 acres could change the underlying ground-water system and affect the brine wells.
- Settlement of soils under the large landfill would change ground water gradients and water levels.
- Rail•Cycle has not undertaken the investigations needed to effects on the brine wells.
- Rail•Cycle's evaluation of potential effects on the brine wells from the proposed landfill water-supply well appears to be based on questionable testing.

(37) CONT.

2. Brine at the existing wells potentially would be contaminated if the landfill leaks; the Draft EIR/EIS and background technical reports show several issues related to liner stability have not been resolved, suggesting a greater potential for leaks than typically expected at a modern landfill.
   - Potential settlement under the landfill in the area of brine wells may be underestimated.
   - Potential for differential settlement has been ignored.
   - Seismic effects are not adequately considered in the area of soft soils, near the brine wells.
   - Surface fissures have been found on the lake bed, adjacent to and projecting toward the proposed landfill; these features may indicate potential hazards to the landfill and should be evaluated thoroughly.
   - Subsurface faults adjacent to landfill may indicate potential hazards to the landfill and should be better understood.
   - The site is along projection of a large-scale fault that may be a potential earthquake source and should be investigated further.

(38)

3. The evaluation of mineral resources at the site was performed in a manner that underestimated the resources present. (39)

Ms. Barbara Ransom
January 12, 1993
Page 3

- Test borings were too shallow; they were only 2/3 depth of the existing brine wells.
- Brine concentrations were reported to increase with depth and a maximum was not reached, further showing that the borings were too shallow. ㊴ CONT.

4. Selection of the Amboy (Bolo Station) site appears to have been based on a questionable siting analysis.
   - There is no indication that Rail•Cycle performed a thorough regional survey.
   - Large areas were excluded improperly based on factors that typically can be addressed in developing a facility of this scale.
   - The only alternate sites that were considered had serious environmental problems, and could not be considered reasonable alternatives.
   - The site-selection study may well have overlooked alternate sites that are equivalent or superior to the proposed landfill site. ㊵

Each of these points are discussed further in this letter.

Various aspects of the site investigations do not appear to have been conducted in accordance with current best industry practice. In addition, various statements in the Draft EIR/EIS appear inconsistent with the information in the background technical documents. Apparent deficiencies in the site investigations and internal inconsistencies are noted where applicable in the following discussions of the technical issues noted above. Other deficiencies that may have been noted are not discussed, as this letter is not intended to be a complete technical review of the Rail•Cycle reports.

POTENTIAL CHANGES IN BRINE PRODUCTION AND QUALITY

The 1991 Preliminary Geotechnical Evaluation concluded that construction of the proposed Rail•Cycle landfill potentially could affect brine production and characteristics due to changes in water levels and hydraulic gradients. Potential for changes due to consolidation of the soft soils underlying the proposed landfill was noted as a particular concern. These factors generally were not addressed adequately in the Draft EIR/EIS and the background technical reports. ㊶

Ms. Barbara Ransom
January 12, 1993
Page 4

The Draft EIR/EIS does not discuss potential changes in water levels and gradients that may result from excavating, lining, and filling the proposed 2100-acre landfill. These effects could be significant because of the large area involved, and should be considered in evaluating potential environmental impacts from the proposed landfill. ㊷

The Draft EIR/EIS dismisses potential affects on the brine wells from settlement of the lake beds under the landfill by stating that only minor consolidation would occur in the sand beds; a response that does not address the problem. Changes in the ground-water system under the proposed landfill potentially could occur due to consolidation of the silt and clay beds alone. Rail•Cycle has estimated that settlements of up to 14 feet could occur in lake beds underlying the landfill. (This estimate appears unconservative for the part of the landfill closest to the brine wells, as discussed in the following section.) Elevation changes of this magnitude would affect hydraulic gradients in sand interbeds, whether or not the sand beds were consolidated as well. ㊸

Consolidation of the silt and clay beds also would involve drainage of substantial volumes of pore water. This water would flow into the more permeable interbeds and potentially could change chemical composition of the brines. While the drainage is occurring, the flow from the consolidating clay and silt beds to the sandy interbeds also could affect hydraulic gradients. ㊹

Rail•Cycle has not undertaken the investigations needed to evaluate potential effects on the brine wells. The deepest Rail•Cycle boring/monitor well in the area of the brine wells in only about 120 feet deep while the brine wells are 300 feet deep. At present there is essentially no information on stratigraphy and ground water characteristics at the brine production depths. Additional borings and monitor wells clearly would be needed to investigate this interval. Moreover, the brine flow system is likely to be complex and extensive hydrogeologic evaluations could be needed to understand it thoroughly. ㊺

The Draft EIR/EIS notes that lowered water levels due to ground water extraction potentially could affect brine production, an issue that was not raised in the Preliminary Geotechnical Evaluation. However, the Draft EIR/EIS concludes that the brine wells would not be affected, based on hydrogeologic evaluations in the Jacobs Phase II study. The Jacobs evaluations were based to a large extent on a pumping test in well P8, using piezometers PC1A and PC1B as observation wells. This test appears to be of questionable validity because these three wells appear to be ㊻ interconnected. Piezometers PC1A and PC1B were installed as two 2-inch wells in a single borehole, a configuration that is difficult to seal properly and commonly interconnects the two screened intervals. (See, for example, Handbook of Suggested Practices for Design and Installation of Ground-Water Monitoring Wells, published by the National Water Well Association.) As the static water levels reported from PC1A and PC1B have been nearly identical, such a connection may well be present. The apparent connection between P8 and PC1A is an even greater concern. The Log of Boring P8 (in Appendix A of the Jacobs Phase II Study) reports that the drill cuttings from 182 feet to the total depth of 233 feet were #3 Monterey sand from PC-1. This log indicates that the completion intervals of wells P8 and PC1A are probably connected at depth. Because of this probable connection, it is very unlikely that the pumping test actually measured properties of the aquifer. Moreover, installing monitor wells that intersect at depth generally is not considered sound practice, raising doubts about the overall quality of the site investigation. ㊻ CONT.

The Draft EIR/EIS proposes that appropriate mitigation measures would be implemented if pumping from their proposed water supply well causes reduced yields in your brine production wells. However, the Draft EIR/EIS does not specify how these effects would be determined. While it appears that Rail•Cycle has good intentions to reduce impacts to "less than significant", it also should be noted that impacts resulting from the construction of the landfill (e.g., consolidation of the underlying soils) probably could not be mitigated. ㊼

POTENTIAL FOR BRINE CONTAMINATION

The Draft EIR/EIS states that the brine wells potentially could be contaminated if leachate or gas were to leak from the proposed landfill. The Preliminary Geotechnical Evaluation also noted that your existing brine wells could be contaminated if the landfill were to leak but concluded that probability of leakage would be low. However, additional data in the Draft EIR/EIS and the Jacobs Phase II Study indicate a greater than normal potential for liner failure in the parts of the proposed landfill closest to the brine wells. A number of potential hazards to the landfill should be evaluated further, as discussed below.

Foundation Settlement:

The discussion of potential ground settlement due to landfill loading appears incomplete in the Draft EIR/EIS and the Jacobs Phase II Study. The primary evaluation of foundation settlement apparently was done by Jacobs. However, the related part (Section 6.3) of the Jacobs Phase II Study contains only a general discussion of various factors involved in determining foundation settlements. It does not include any quantitative presentations or summaries of the foundation settlements that were calculated for the various parts of the landfill area. This section does note that the depth to bedrock under the landfill was estimated to be up to 1700 feet (based on a geophysical survey) and that characteristics of the deeper soils were extrapolated from the shallow data obtained in the site investigation. Such extrapolations may not be valid as there is no way to know what percentage of the deeper section contains clay beds, or to know the thicknesses of the beds. The conclusions of the Jacobs report say that foundation settlements would be 1 to 14 feet but does not indicate how these numbers were derived. ㊽

The Draft EIR/EIS presents a similar description of the estimated settlements but states that settlement was calculated assuming a maximum 200-foot thickness of compressible soils. The basis for this 200-foot thickness is not discussed. The maximum thickness of compressible soils is likely to be much greater than 200 feet under the part of the proposed landfill closest to the existing brine wells, where the estimated depth to bedrock is shown as about 1800 feet on Jacobs Figure 6-7. A greater than expected thickness of compressible soils could result in correspondingly greater foundation settlements, which in turn, could cause problems for the landfill liner and other structures. ㊽ CONT.

In discussing foundation settlements, the Jacobs Phase II Study states that no abrupt differential settlements will occur across the site because no abrupt changes in soil stratigraphy are observed on the soil profiles developed from their drilling program (Figures 4-8 through 4-12 of that report and Figure 4.2.6 of the Draft EIR/EIS). This statement is both illogical and inaccurate. The referenced profiles were developed from borings about a half mile apart and are not suitable for determining presence of abrupt changes in soil stratigraphy. Moreover, examination of the referenced figures shows very significant changes in soil stratigraphy between borings. For example, Jacobs Figure 4-8 shows sand to about 90 feet depth at boring MW3 while the same section is nearly all silt and clay at the closest boring, MW5. The transition between these very different soil units is drawn on the cross section as a stylized interfingering but there is no data to support this interpretation. Similar differences between the soil profiles in the northern and southern part of the proposed landfill area are seen on Jacobs Figures 4-9 and 4-10. Closely spaced drilling would be needed to reliably determine whether or not abrupt lateral changes are present in this transition area. Differential settlements may well be a concern in this area as the existence of surface fissures on the lake bed demonstrates that non-uniform settlement can occur. (48) CONT.

Seismic Effects:

Rail•Cycle appears to have devoted a substantial effort to evaluating seismic conditions. The Jacobs Phase II Study includes extensive discussions of tectonics and seismicity, apparently prepared for Jacobs by outside consultants MESA^2 Inc. and MAA. The Draft EIR/EIS apparently contracted a separate study, by Petra Geotechnical, Inc. Both of the seismic evaluations estimated peak earthquake ground accelerations expected to occur at the landfill site by using standard magnitude/distance attenuation relationships. These methods provide estimates of ground surface accelerations on bedrock and probably are valid for the dense granular soils in the northern part of the proposed landfill. However, additional analyses would be needed to properly evaluate seismic shaking for the southwestern part of the proposed landfill, which is underlain by a thick layer of relatively soft soil.

(49) There is no report of separate analyses to address the different ground conditions in the southwestern part of the proposed landfill, or of evaluations to determine whether or not separate analyses are needed. The Jacobs Phase II Study (Section 5.5.2) notes that additional site-specific analyses typically are needed where such unusual soil conditions exist. Evaluations of seismic shaking in this part of the area also should consider potential amplification effects related to the irregular bedrock topography interpreted from the geophysical survey performed for Jacobs. As these unusual ground conditions apparently have not been considered in the seismic evaluations for the proposed landfill, the landfill structures closest to the brine wells potentially could experience higher-than-expected seismic deformations, thereby increasing the probability that they could fail in event of a large earthquake.

Surface Ruptures:

(50) Potential for ground displacements also does not appear to have been evaluated completely. The Draft EIR/EIS states there are no active or potentially active faults within 20 miles of the site. This conclusion is not supported by the Jacobs Phase II Study, which describes an alignment of fissures at the ground surface just southwest of the proposed landfill, near your existing brine wells. The Jacobs Phase II Study (Section 4.2.4.1) reports that hand excavations along the largest of these features found "1.5 feet of differential elevation change". The meaning of this phrase is not entirely clear but it suggests possible surface displacements. As the surface sediments in the lake bed are

almost certainly younger than 11,000 years, features displacing these sediments would be categorically defined as Holocene (active) faults.

It has not been determined whether or not the surface features are related to tectonic faulting. They generally coincide with a steep slope in the buried bedrock surface, interpreted to be a fault by Jacobs' geophysical consultant. While there is some possibility that the surface fissures are related to movement on the buried fault, they are more likely due to differential consolidation of the soft lake sediments over the irregular buried bedrock topography. In either case, the surface ruptures indicate a potential hazard to the landfill; a landfill liner could be damaged by substantial displacements of the underlying foundation soils whether or not the movements are related to larger-scale tectonic activity. Fissures caused by differential consolidation of the soft soils actually may represent a greater hazard to the landfill because their movement could be increased and possibly extended into the liner area by the landfill loading.

The Jacobs Phase II Study (Section 4.2.4.4) recommends trenching along the largest fissure to determine whether or not it is an active fault. This probably is not feasible. (50) CONT. In order to demonstrate that a break is not an active fault, it would be necessary to show that it does not offset a pre-Holocene (i.e., older than about 11,000 years) geologic horizon. The base of the Holocene in the Bristol Lake bed is likely to be deeper than can be investigated by trenching and would be very difficult to identify in borings. At any rate, the fact that the feature is expressed on the late Holocene lake surface would be ample evidence of recent movement. Additional detailed field investigations would be useful here to examine possible projections of the surface fissures into the proposed liner area.

Additional investigation of the subsurface faults identified from the geophysical surveys would be appropriate to determine their significance for the proposed landfill and potential effects on the adjacent brine wells. The feature southwest of the proposed landfill, near the brine wells, is defined by a very steep gravity gradient and was described by Jacobs' geophysical consultant as certainly indicating faulting (see Gravity and Magnetic Studies of the Rail•Cycle Project Site, by Shawn Biehler, Ph.D.). Other possible faults are interpreted northeast of the site, as shown on Figure 3-12 in the Jacobs Phase II Study. The relationship of these subsurface features to surface faults has not been established.

The subsurface faults are along the general projection of the Bristol Mountain fault, which is exposed in the bedrock northwest of the site, and have a similar northwesterly trend. The Bristol Mountain fault comprises a series of individual fault traces mapped in the Bristol Mountains. It is about 20 miles long and trends directly toward the proposed landfill site (see Figure 4-3 of the Jacobs Phase II Study or Figure 4.2.1 of the Draft EIR/EIS). Regional mapping by the California Division of Mines and Geology (reproduced in the referenced figures) shows these fault traces juxtaposing Quaternary age alluvium against older bedrock. These relationships would indicate the fault is at least potentially active, but may not be accurate in detail and should be checked by larger-scale mapping. A regional summary of seismic hazard in California (by S.G. Wesnousky, Journal of Geophysical Research, 1986) also suggested the Bristol Mountain fault is at least potentially active and estimated that it could produce a magnitude 7.0 earthquake.

The Jacobs Phase II Study concluded that the Bristol Mountain fault is inactive, based on reference to a 1990 Geological Society of America (GSA) abstract and interpretation of satellite imagery. There is no indication that the fault was examined on the ground, and a more thorough evaluation would be appropriate. In general, GSA abstracts are not considered definitive references because they are very brief summaries of oral presentations and are not closely reviewed by the GSA before publication. The referenced abstract also appears to be a regional overview that may or may not contain original site-specific information. The interpretation of satellite imagery also cannot be considered definitive as such images typically do not have the resolution needed to reliably determine age of fault movements. Additional field mapping would be needed to reliably determine whether or not the Bristol Mountain fault is potentially active and to evaluate it's relationship with the subsurface faults adjacent to the proposed landfill. Although there is not a high probability that the fault is active, it is important to resolve any uncertainties for a project of this scale. (50) CONT.

MINERAL-RESOURCE EVALUATION

Presence and concentrations of brine resources at the proposed landfill site were evaluated by collecting water samples during drilling of two borings, MW7 and P15. The samples were taken at six depths between 60 and 200 feet in each boring. These water samples were analyzed for various evaporite constituents and the results were evaluated to determine whether the brines underlying the area meet BLM criteria for economic resources. The Draft EIR/EIS and the Jacobs Phase II Study emphasize that this program was performed at direction of BLM. I understand that the scope of this work actually was determined in extensive negotiations between Rail•Cycle and BLM, and that BLM staff reportedly wanted much deeper exploration. (51)

Results of these tests indicated greatly increasing brine concentrations with depth. Both the Jacobs Phase II Study and the Draft EIR/EIS suggested that the brine concentrations were likely to increase further below the depths of these borings. The initial evaluations of the test results, by Waste Management, Inc. (Vertical Mineral Quality Assessment, July 1991) and Jacobs (Mineral Potential Report, August, 1991), concluded that the samples tested did not meet the BLM criteria for economic resources. A later evaluation, in Appendix D of the Draft EIR/EIS, found that the deepest samples did slightly exceed the BLM criteria for economic concentrations of sodium chloride. However, it appears likely that much higher concentrations could be found at greater depths, based on the trend of increasing concentrations in the samples tested and the presence of nearby wells that are producing economic brines from 300 feet depth. (51) CONT.

The reports do not discuss why exploration was limited to a depth of 200 feet, even though brine concentrations were still increasing. A minimum reasonable target depth would appear to be 300 feet, as that is the depth of the nearby producing brine wells. Another reasonable approach would be to continue drilling and sampling until field measurements of conductivity or specific gravity indicated no further increase in brine concentrations. It is unreasonable to expect that a program of sampling to only 2/3 the depth of the existing production wells could be expected to provide a realistic estimate of resource potential. Deeper drilling and additional sampling clearly would be needed to properly evaluate the brine resources.

SITE SELECTION PROCESS

The site-selection process used by Rail•Cycle does not appear to have followed the typical procedures used for a project of this scale. A typical comprehensive siting study would involve:

1. Defining the total area available, in this case land within a specified distance from existing ATSF rail lines.
2. Excluding lands that are unavailable for use, such as areas of critical environmental concern or military reservations.

3. Ranking the available land according to factors involving economics or convenience, such as land ownership, haul distance, difficulty of site development, or need to upgrade existing roads.

The description of the Rail•Cycle siting process in the Draft EIR/EIS indicates that a different approach was used here. From the documents reviewed, it is not clear whether Rail•Cycle performed a comprehensive regional siting study. The process appears to have started with sites identified by a 1988 study by Southern California Association of Governments (SCAG). An additional study by Jacobs (Alternative Rail•Cycle Landfill Sites - Preliminary Analysis, December 1990 and May 1991) evaluated four alternate sites in the Amboy-Cadiz area. It does not discuss how these alternative sites were identified. (52)

Three of the four alternative sites evaluated by Jacobs were eliminated due to environmental conditions. Two were within Category I (high quality) habitat for the threatened desert tortoise and one was adjacent to a BLM special interest area. Such conditions typically would be considered in the initial screening of the study area.

The Draft EIR/EIS discusses alternative "locales", or site areas, located along the rail line between Barstow and Amboy. These were excluded from further consideration, mainly because ATSF does not presently own land within those areas. The Draft EIR/EIS does not discuss whether difficulty of obtaining the land was investigated. Two of the locales also were excluded because of limited access from existing highways and another was described as offering limited configurations for development. The Draft EIR/EIS does not indicate whether these difficulties were weighed against other siting considerations. Typical siting studies would not exclude large areas because of these conditions; most projects of this scale expect to purchase land and build new access roads. (53)

The large areas that were excluded from further consideration may well contain sites suitable for the Rail•Cycle landfill. Other suitable sites also might be identified in a comprehensive regional study. Development of a Rail•Cycle landfill thereby could be accomplished without disrupting the existing salt facility.

CONCLUSIONS AND RECOMMENDATIONS

In summary, this review found that several potential impacts on the existing brine wells from the proposed landfill do not appear to have been addressed adequately in the Draft EIR/EIS and background references:

1. The additional work described in the Jacobs Phase II Study and the Draft EIR/EIS has not adequately addressed potential impacts on brine production from construction of the proposed landfill and associated phenomena, such as settlement of the underlying soils.

2. The evaluations of foundation settlement have not adequately considered conditions in the part of the proposed landfill closest to existing the brine wells; greater than expected settlements and unanticipated differential settlements potentially could damage the landfill liners, leading to contamination of the brine.

3. The evalustions of seismic effects have not adequately considered ground conditions in the part of the landfill closest to the brine wells; if a large earthquake were to occur, greater than expected seismic deformations potentially could damage the landfill liner and lead to contamination of the wells.

4. Surface fissures (on the lake bed) projecting toward and adjacent to the proposed landfill in the area of the existing brine wells may indicate potential for damage to the liner from foundation settlement or tectonic movements, and need further evaluation.

5. Additional investigations are needed to determine significance of the buried fault (identified from geophysical surveys) adjacent to the proposed landfill in the area of the existing wells; this fault is along the projection of a 20-mile long fault zone that has been suggested to be capable of a magnitude 7.0 earthquake.

Several of these points relate to general suitability of the proposed landfill site, addition to indicating potential impacts on the existing brine wells. In general, the site investigations for the proposed landfill do not appear to have adequately considered the variations in geotechnical conditions over the 2100-acre site.

Validity of the overall environmental evaluation for the proposed landfill can be significant in relation to the potential impacts on the existing brine production. The investigation of mineral resources at the proposed landfill site clearly was not adequate and appears to have greatly underestimated the resources present, thereby reducing the apparent impact of the project. The site-selection study for this project also does not appear to have adequately

Ms. Barbara Ransom
January 12, 1993
Page 13

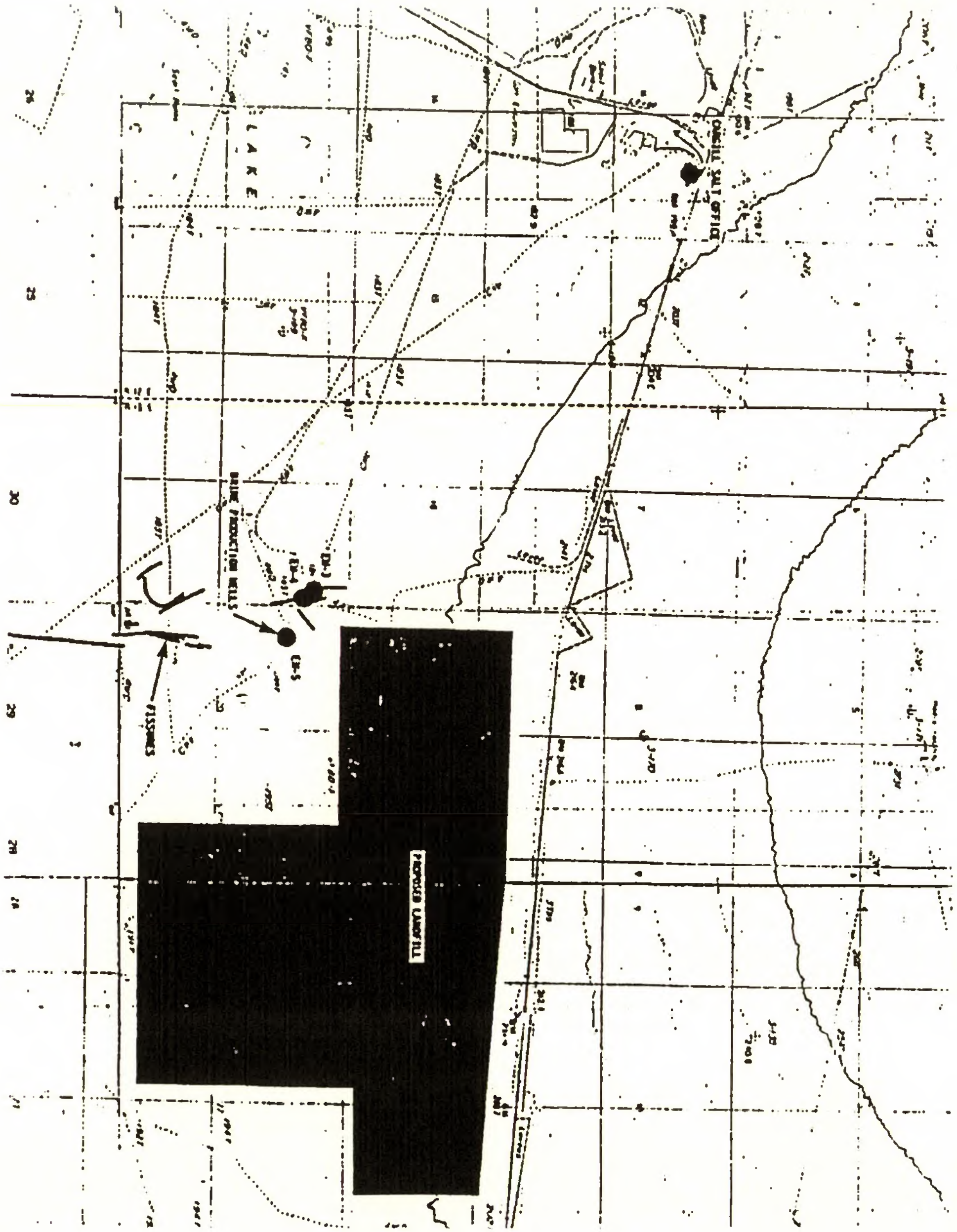
considered potential alternatives, giving the inaccurate impression that the impacts at this location are needed in order to realize benefits of the project.

Substantial additional investigations would be needed for Rail•Cycle to determine potential effects of the proposed landfill on the existing brine wells. As noted above, several of the issues relating to potential impacts on the brine wells also relate to general integrity of the landfill. These should have to be resolved before permitting, whether or not the brine wells were involved.

I have appreciated this opportunity to be of service. Don't hesitate to call with any questions.

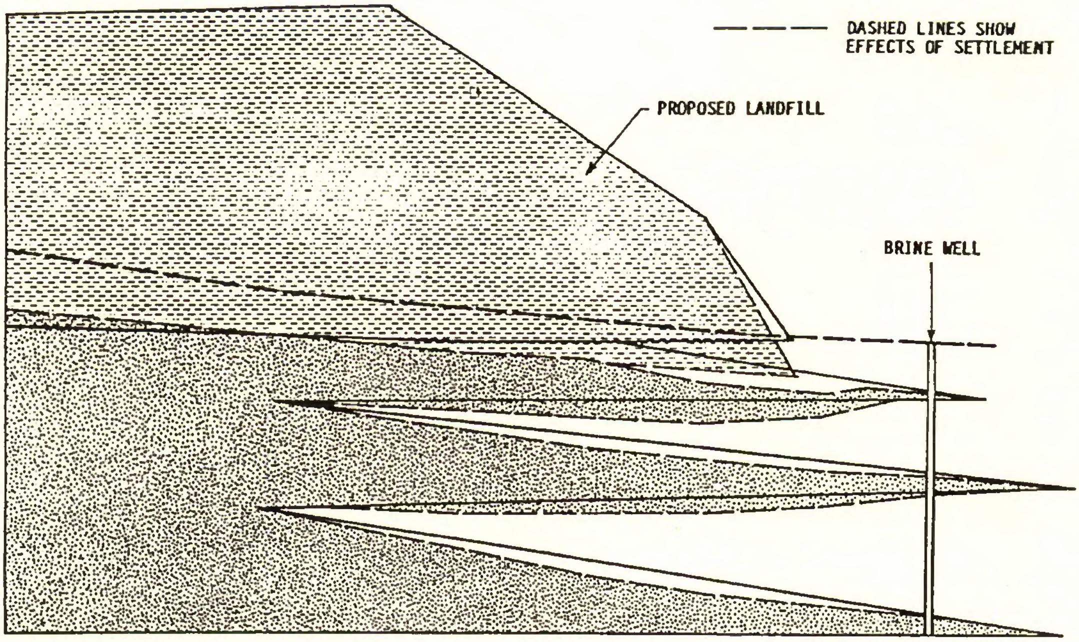
Sincerely,

Morris A. Balderman
Certified Engineering Geologist EG 940



EX.4

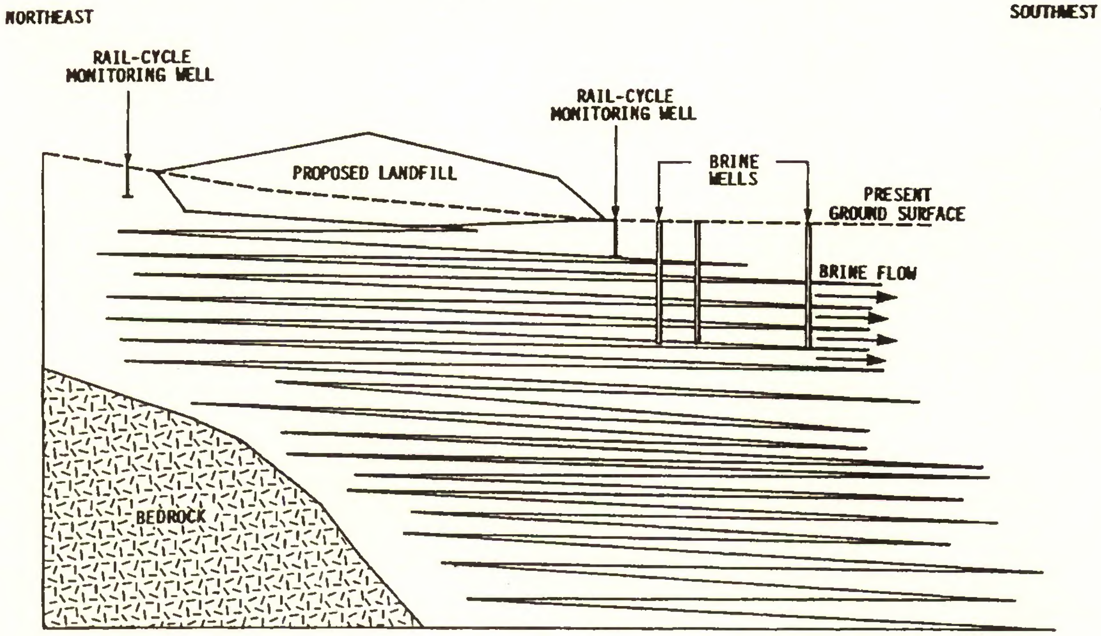
DIAGRAMMATIC CROSS SECTION (DETAIL)



NOT TO SCALE

EX.3

DIAGRAMMATIC CROSS SECTION BRINE WELLS AND PROPOSED LANDFILL



NOT TO SCALE

DOCUMENT 039
CARGILL SALT DIVISION
RESPONSE TO COMMENTS

Response 039-01

1. It is acknowledged that the Cargill wells are about 400 yards from the closest proposed landfill feature. However, as stated in Section 5.2 of the Draft EIR/EIS, and Sections 5.2 and 5.3 of the Supplement, no impacts are expected to the Cargill wells from the proposed action.

Response 039-02

1. A substantial effort has been undertaken by Rail•Cycle to provide the assurance that significant threats to either the quality or quantity of Cargill's brine resources would not result due to implementation of the proposed landfill. Detailed analysis related to this issue, which has been conducted subsequent to distribution of the Draft EIR/EIS, was documented in numerous reports (Jacobs 1992a, 1992c, 1993a, 1993b; Rail•Cycle 1992a; Rust 1993a, 1993b, 1993c).

2. The results of the additional fieldwork, computer modeling, and other analyses were summarized in Chapters 4.0 and 5.0 of the Supplement. Conclusions based on the subsequent studies which were conducted include the following:

    - No significant change to the quality of the brine fluid produced by Cargill would occur due to the consolidation of clay materials within Cargill's pumping drawdown cone.
    - The vertical spread of any migration of gas and leachate from the waste body would be controlled by the speed at which it could disperse and diffuse within the aquifer. Given the slow measured rates of ground water movement at the site, in the unlikely possibility of a release, corrective actions to remediate a release could be undertaken long before significant downgradient movement could occur.
    - Onsite ground water pumping for the landfill uses at the Section 9 location would not interfere with the Cargill Salt Wells. The relocation of this well, to be located in Section 33, would further reduce the potential for impacts to the brine resource.

3. Section 3.2.4 of the Supplement provided additional information on the proposed liner, and leachate collection system. The proposed double-composite liner system and dual leachate collections system would provide redundancy to assure that leachate is collected. Also described is the UZM system which would essentially provide complete coverage of the unsaturated (vadose) zone beneath each module to assure early and sensitive detection in the unlikely possibility of a release.

4. The cone of depression created by Cargill's brine pumping was considered in the hydrogeologic modeling of ground water movement beneath the site. Chapters 4.0 and 5.0 of the Supplement summarized the results of the refined analysis of cumulative settlement potential (due to landfilling, brine production, and ground water pumping for onsite use) and ground water flow.

Response 039-03

1. The geophysical survey and trenching analysis to verify the presence or absence of active and potential active faults at the proposed site was accomplished as requested by the RWQCB (Jacobs, 1992b). This analysis confirmed the findings and conclusion of the previous Phase I and II geologic site characterization investigation that there are no Holocene faults at or tending towards the proposed site.

Response 039-04

1. As noted in the previous response, based on thorough seismic investigation of the site, the absence of Holocene faulting in the vicinity has been verified. Mitigation measures included in the EIR/EIS are, therefore, sufficient to mitigate potential seismic induced settlement.

Response 039-05

1. The additional investigation as referenced in this comment has been conducted. The methodology and results of the geophysical surveying were summarized in the Supplement (Sections 4.1 and 5.1).

Response 039-06

1. Chapters 4.0 and 5.0 of the Supplement provided supplemental analysis on the potential cumulative impacts of the landfill in conjunction with ground water pumping at the site. These chapters summarize numerous studies which have been conducted since the distribution of the Draft EIR/EIS, including detailed settlement calculations based on a soils investigation conducted in September 1992. Although the landfill is conservatively designed for the maximum

settlement which would occur under soil conditions, as characterized by the previous sampling event ("normal to slightly over-consolidated soils"), the results of the refined analysis indicate that the soils underlying the site are "over-consolidated." Potential settlement under these conditions, due both to ground water pumping and landfill weight, would be substantially less relative to "normally consolidated soil conditions." The landfill design is conservatively based on the maximum settlement which could occur (at the southwestern portion of the site) under "normally consolidated soil conditions."

2. Section 5.1.1.2.3 of the Supplement provided additional discussion regarding the potential for differential settlement at the landfill. Due to the gradational nature of the soils beneath the site (from predominantly cohesionless on the north to predominantly cohesive on the south), the potential for abrupt differential settlement is considered remote. Instead "tilting" of the landfill may occur and is expected to be in the range of less than 0.01 (vertical:horizontal). This amount of differential settlement (0.01 slope) would cause the FML to stretch by 0.005 percent or 5 feet per 100,000 feet of linear length of liner. The proposed liner material (including seams) is capable of stretching up to 13 percent of its length without loss of its initial physical and containment properties.

3. Subsequent hydrogeologic analyses were conducted which included an evaluation of the potential effect of ground settlement on the underlying aquifer (Jacobs, 1993b). The results of additional field investigations were summarized in Sections 5.2 and 5.3 of the Supplement.

Response 039-07

1. The potential project impacts on both the quantity and quality of the brine resource was addressed in Sections 4.3 and 5.3 of the Supplement. The information provided demonstrates the limited probability that the brines would be contaminated. Even in the event of a breach in the liner, leak detection would be early and sensitive with the proposed UZM system. Further, because ground water movement under the site moves at an extremely slow rate (0.05 feet per day), there would be sufficient time to implement corrective action.

2. Requirements of Subtitle D and CCR Title 23 include corrective action to prevent movement beyond the boundary of the landfill in the event the landfill contaminates ground water. As discussed in Sections 5.2 and 5.3 of the Supplement, control of releases could be through the installation of liquid and/or gas extraction wells. Construction of a grout curtain or cutoff wall downgradient of the release could be used to isolate the release from contamination of ground water offsite. The grout wall would limit the size of the contaminated area and substantially reduce the amount of ground water requiring pumping and treatment. Any detected failures could be isolated and corrective action implemented. The slow movement of the ground water would allow adequate time (in excess of several years) to implement an appropriate corrective action plan without threat to the Cargill production wells.

Response 039-08

1. The RWQCB would have the responsibility of administering the "financial assurance" for a "reasonable foreseeable release" to the ground water underlying the proposed landfill. Acceptable financial instruments are:
   - U.S. Treasury Bills.
   - Irrevocable letters of credit.
   - Bonds.
   - Other stable instruments in which the RWQCB is named as sole recipient.

Response 039-09

1. In the event a pump and treat program was established to remediate a release to ground water, construction of a grout curtain or cutoff wall downgradient of the release would limit the size of the contaminated area and substantially reduce the amount of ground water requiring pumping and treatment. Whether the pumped water was used onsite or reinjected into the aquifer, it is not anticipated to appreciably affect the drawdown or pumping rate of the Cargill wells.

Response 039-10

1. The ground water beneath the site is derived from flows originating from Orange Blossom wash drainage that encompasses 90+ square miles north of the site. The landfill footprint covers 2,100 acres or 3.5 square miles, which is 3.9 percent of the 90+ square miles of aquifer recharge area. Consequently, the loss of surface infiltration due to landfill construction is considered negligible.

2. Subsequent hydrogeologic analyses was conducted which included an evaluation of the potential effect of ground settlement on the underlying aquifer (Jacobs, 1993b). The results of additional field

investigations were summarized in Sections 5.2 and 5.3 of the Supplement. The settlement related to the landfill would have a negligible effect on ground water flow in the aquifer.

Response 039-11

1. See Response 039-7.

Response 039-12

1. The BLM has completed its evaluation of mineral resource value at the proposed site. This information was included in Section 4.3.2 of the Supplement. As discussed in this section, upon review of the preliminary mineral resource investigation results conducted by Rail•Cycle (Jacobs, 1991a), the BLM concluded that the southern portion of the proposed landfill site (i.e., Section 22) would be reclassified as valuable for prospecting for calcium chloride, and prospectively valuable for sodium chloride.

2. Based on the above reclassification, the BLM conducted a more detailed investigation into the market for calcium and sodium chloride (Waiwood, 1994). This investigation was made to determine whether there existed within the proposed site, valuable deposits of calcium and sodium chloride that would be affected by the landfill.

3. Subsequent to preparation of the Draft EIR/EIS, a 500-foot borehole was drilled in the southwest corner of Section 16, at the request of BLM, as part of a supplemental evaluation of mineral potential at the site. Within the area of lakebed sediments sampled in this borehole (i.e., below 390 feet), mineral deposits were limited to several thin zones (less than 10 inches thick) of evaporate mineralization, consisting predominately of calcite and gypsum encountered within clay layers (Rust, 1993e). Based on the results of the analysis from the 500-foot borings, it was concluded that "sustainable, leachable/mineable quantities of ground water are not present for economic development at this location" (Rust, 1993e).

4. The BLM concluded that while data from the borehole sampling conducted by Rail•Cycle showed a presence of calcium and sodium chloride, at present, a viable commercial operation could not be sustained from limited well yields and low calcium and sodium concentrations from well production at the site (Jacobs, 1991a; Rust, 1993e; Waiwood, 1994). Concentrations of calcium and sodium in the brine/water and well yields would not produce a profitable operation if capitalization and amortization of new solar facilities were required.

5. BLM has concluded that while the proposed site may be prospectively valuable for calcium and sodium mineral resources, there are no known minerals of quantity and quality beneath the proposed landfill site that have a present economic value (Jacobs, 1991a; Rust, 1993e; Waiwood, 1994). Based on this finding BLM and Rail•Cycle have agreed to value the prospective mineral rights of the proposed exchanged federal lands based on comparable values for minerals from recent private transactions in the area, where minerals of similar prospective value were present.

Response 039-13

1. Minimal drainage alteration would occur as a result of development of the landfill as proposed, and the dominant north-south direction of flow would be maintained. The landfill site comprises only 3.9 percent of the contributory drainage area, and loss of infiltration due to landfill construction would be minimal.

Response 039-14

1. As discussed in Chapter 3.0 of the Supplement, the location presently proposed for the wells to meet onsite water needs is in the southeast corner of Section 33 (see Figure 3.1 of the Supplement). Modeling was conducted to simulate the effects of long-term pumping to meet onsite water needs at the previously proposed well location in the northeast corner of Section 9 (Rust, 1993b). Based on the modeling, it was concluded that adequate water supplies for projected onsite use is available at that location.

2. The Rust report concluded that ground water pumping at the Section 9 location would not interfere with the Cargill brine production. The report also notes that relocation of the wells, as currently proposed to Section 33, would further reduce the potential for interferences with the brine resources.

Response 039-15

1. Responses to the seismic and settlement issues are addressed under discussion of the specific comments in this letter.

Response 039-16

1. Dust control water usage was refined in Chapter 3.0 of the Supplement. In addition to water and chemical dust suppressants, binding agents would be used to control fugitive dust emissions at the proposed landfill.

Response 039-17

1. Section 5.12.1.1.2 of the Draft EIR/EIS addressed the impacts of the proposed action on traffic from the increase of 14 trains per day. This analysis includes the ATSF rail line near Cargill's facility at Saltus and includes the crossing at Saltus Road that is used to access the Cargill facility.

2. Regarding the safety issue at the Saltus Road crossing, as noted in Appendix I (see Table I.1) of the Draft EIR/EIS, this crossing has a signal device known in the railroad industry as a "cross-buck." The type of crossing signal required at specific rail crossings is based on a number of factors that are considered by the PUC. Factors taken into account by the PUC in determining the appropriate type of crossing signal includes number of trains, authorized train speed, number of cars crossing the tracks, and the number of accidents. The PUC constantly monitors these factors and directs the upgrading of crossing signals as required.

Response 039-18

1. A landfill at the proposed site is not consistent with current land use designation for the site under the existing CDCA Plan. However, the proposed land use classification issue can be resolved through land exchange and amendment of the CDCA Plan.

2. The County Development Code allows landfills in various land use designations, including a Resource Conservation District, under the provisions that allow other land uses based on meeting locational criteria. The use of the proposed site as a landfill appears to meet these locational criteria; however, ultimately the County Board of Supervisors would consider this issue as part of its decision on the proposed amendment of the County General Plan that would be required for the proposed project to be permitted at the Bolo Station site. The consideration of the proposed project by the County Board of Supervisors would consider the regional perspective of the project as it relates to land use and consistency with the policies of the County General Plan.

Response 039-19

1. Section 5.14 of the Draft EIR/EIS discussed potential land use impacts of the proposed action. The analysis in the Draft EIR/EIS did not identify significant impacts to existing permitted uses in the project area. The Draft EIR/EIS contains mitigation measures designed to protect surrounding uses, including the Cargill operations, from adverse impacts. The analysis found that the proposed action would result in a significant, unavoidable land use impact associated with the change from the existing rural low intensive use of the site to an intensive industrial-type use.

2. Section 5.14.1.2 of the Draft EIR/EIS incorrectly indicated that the proposed project would require reclassification of the land use designation of the proposed site from Resource Conservation to a land use that would allow a more intensive use of the site. If the County Board of Supervisors approves the proposed project, the County General Plan would be amended to revise the Infrastructure/Improvement Level Map and accompanying text to designate the site as the Bolo Station Landfill.

3. The Draft EIR/EIS addressed County General Plan consistency in the evaluation of the proposed project's impacts to minerals, open space and land use. The Draft EIR/EIS identified these impacts after mitigation as significant and unavoidable. Additionally, the Summary Table of Impacts (Table 1.1) in the Draft EIR/EIS identified these unavoidable impacts as inconsistent with the County General Plan. The impact summary, however, was not the conclusion reached in Sections 5.9.1.2 and 5.14 of the Draft EIR/EIS. The Draft EIR/EIS should have discussed that County General Plan determinations are the prerogative of the County Board of Supervisors as the policy making body of the County. Because there are many factors considered in an ultimate determination of General Plan consistency, the final conclusions are reserved as part of the Board of Supervisor's action based on the merits of the project. The initial determinations of inconsistency on the issues of open space and land use were reached on a limited, issue-specific evaluation that did not include the more comprehensive evaluation that the County Board of Supervisors will make when considering overall consistency of the proposed project with the applicable policies of the County General Plan.

Response 039-20

1. The Draft EIR/EIS Impact Summary Table (Table 1.1) identified that the impacts to mineral

resources resulted in a General Plan inconsistency which would result in a significant unavoidable impact. However, Section 5.3 of the Supplement further assessed the potential impacts to minerals and resulted in additional mitigation being added. Upon final analysis of the nature of the resource, the potential impact and the required mitigation, impacts to mineral resources would be reduced to below a level of significance. This leads to the refined conclusion that there are no significant unavoidable impacts to mineral resources and that the proposed project is consistent with the applicable policies of the County General Plan.

Response 039-21

1. See Response 039-19.

Response 039-22

1. County policy regarding land uses deemed incompatible with mineral resources and requiring a buffer zone, is based on potential disturbance to nonmining uses by mining operations which could result in public demand for cessation of mining operations. This definition is based on uses which prevent mining because of the higher economic value of those uses. An example of such a conflict would be between a residential development and mining operation, whereby residents of a subdivision adjacent to mining operations complained that operations were incompatible with the use of their homes, and diminished their use, and enjoyment, in addition to the home's value. A landfill would not be adversely affected by adjacent mining operations.

Response 039-23

1. BLM has the responsibility to administer the lands of the federal government that would be involved in the land exchange for Sections 8 and 15 and the west half of Section 22 for the proposed action. BLM, under Directive 3021, Lands Prospectively Valuable for Leasable Minerals, has assessed the value of exchanged properties. Determination of the mineral value is part of the land exchange agreement.

2. As discussed in Section 4.3.2 of the Supplement, upon review of the preliminary mineral resource investigation results conducted by Rail•Cycle (Jacobs, 1991a) the BLM concluded that the southern portion of the proposed landfill site (i.e., Section 22) would be reclassified as valuable for prospecting for calcium chloride, and prospectively valuable for sodium chloride.

3. Based on the above reclassification, the BLM conducted a more detailed investigation into the market for calcium and sodium chloride (Waiwood, 1994). This investigation was made to determine whether there existed, within the proposed site, valuable deposits of calcium and sodium chloride that would be affected by the landfill.

4. Subsequent to preparation of the Draft EIR/EIS, a 500-foot borehole was drilled in the southwest corner of Section 16, at the request of BLM, as part of a supplemental evaluation of mineral potential at the site. Within the area of lakebed sediments sampled in this borehole (i.e., below 390 feet), mineral deposits were limited to several thin zones (less than 10 inches thick) of evaporate mineralization, consisting predominantly of calcite and gypsum, encountered within clay layers (Rust, 1993e). Based on the results of the analysis of the data from the 500-foot borings, it was concluded that "sustainable, leachate/mineable quantities of ground water are not present for economic development at this location" (Rust, 1993e).

5. The BLM concluded that while the indications of the limited borehole sampling by Rail•Cycle showed a presence of calcium and sodium chloride, a present, valuable commercial operation could not be sustained from limited well yields and low calcium and sodium concentrations from well production from the site (Jacobs, 1991a; Rust, 1993e; Waiwood, 1994). Concentrations of calcium and sodium in the brine/water and well yields would not produce a profitable operation if capitalization and amortization of new solar facilities were required.

6. BLM has concluded that while the proposed site may be prospectively valuable for calcium and sodium mineral resources, there are no known minerals of quantity and quality beneath the proposed landfill site that have a present economic value (Jacobs, 1991a; Rust 1993e; Waiwood, 1994). Based on this finding, BLM and Rail•Cycle have agreed to value the prospective mineral rights of the proposed exchanged federal lands, based on comparable values for minerals from recent private transactions in the area, where minerals of similar prospective value were present.

Response 039-24

1. The criteria and evidence for selection of project alternatives were clarified in Chapter 3.0 of the Supplement. Potential alternative sites were identified based on specific siting, design and

operational criteria for a rail-haul landfill. These criteria were applied to a regional map of the southern California desert to screen out unsuitable sites. Sites that met basic siting and operational criteria then underwent a second-tier review, which evaluated site-specific environmental concerns. Based on this evaluation, specific alternative sites were selected to be evaluated in detail in the EIR/EIS. The procedure was essentially that as recommended by the commenter.

Response 039-25

1. The discussion in Section 3.7 of the Draft EIR/EIS regarding the alternative site selection process has been clarified in Chapter 3.0 of the Supplement. The criteria upon which sites were evaluated for further study were developed, based in part, on the applicant's objectives, as well as the feasibility for the applicant to implement the project. Because Rail•Cycle cannot develop sites where there is no possibility of acquiring the land, those sites were eliminated.

Response 039-26

1. As discussed in Section 3.3 of the Supplement, potential alternative sites were initially screened based on basic siting and operational criteria related to their ability to support a rail-haul landfill. The Cadiz Valley Alternative site was selected for detailed analysis in the Draft EIR/EIS based on its ability to meet these criteria.

Response 039-27

1. The commenter has incorrectly inferred from the Draft EIR/EIS that impacts at the Bolo Station site are "needed" to realize the benefits of the proposed action. No such meaning was intended.

Response 039-28

1. It is acknowledged that calcium chloride has uses other than de-icing. However, according to the U.S. Bureau of Mines, the most common use of calcium chloride is for de-icing (U.S. Bureau of Mines, 1991).

Response 039-29

1. The statement "No mineral production is currently undertaken at the site" (page 4.3-5 of the Draft EIR/EIS) is a true statement. No minerals are mined on site. The commenter's statement that mineral production is performed directly adjacent to the site within 400 yards is acknowledged.

Response 039-30

1. As prepared, Table 4.4.3 of the Draft EIR/EIS is believed to be correct. From the comment, it is not clear which information is believed by the commenter to be incorrect.

Response 039-31

1. It is acknowledged that depth to bedrock has not been confirmed by drilling. For the purposes of NEPA and CEQA, it is not necessary to attain the degree of accuracy that would be provided by drilling. This was acknowledged in Section 4.4 of the Draft EIR/EIS, which states that: "Depth to bedrock has been estimated through a geophysical survey (gravity and magnetic study), but has not been confirmed by drilling onsite (Biehler, 1991)." As stated, the degree of accuracy is sufficient for purposes of environmental analysis.

Response 039-32

1. The commenter's opinion as to the validity of maximum settlement depth is noted. Clarified information was provided in Chapters 4.0 and 5.0 of the Supplement.

Response 039-33

1. Final requirements for the landfill liner system would be determined in accordance with criteria of the RWQCB, CIWMB, and the LEA. The final liner design criteria would provide adequate buffer in the event of failure. In addition, monitoring requirements would assure early leak detection in the unlikely event that a release occurs, so that environmental damage could be avoided or minimized.

Response 039-34

1. As discussed in Response 039-12 based on a review of the available data (i.e., Jacobs, 1991a; Rust, 1993e; Waiwood, 1994), the BLM has concluded that while the proposed site may be prospectively valuable for calcium and sodium mineral resources, there are no known minerals of quantity and quality beneath the proposed landfill site that have a present economic value.

2. Regarding the issue raised by the comment concerning the regional and county-wide production rate of calcium chloride, the capacity of calcium chloride producers in the United States has been estimated to be between 905,000 to 1,114,000 tons per year (Condor, 1993). This compares to the production capacity of the two producers in Bristol Dry Lake, estimated to be

15,000 to 18,000 tons per year for Cargill Salt and 11,000 to 15,000 tons per year for National Chloride (Condor, 1993).

3. The demand for calcium chloride was estimated by the U.S. Bureau of Mines at 762,000 tons in 1989 and 770,000 tons in 1990. A study by the Mannsville Chemical Products Corporation (1989) concluded that the long-term U.S. demand for calcium chloride would be static or declining, concurrent with changing environmental, economic, and energy policies that mitigate against its use.

4. In 1991, the U.S. Bureau of Mines assessed the calcium chloride market in relation capacity, as follows: "There is already an excess of capacity in the calcium chloride industry. This excess capacity is likely to become more acute as additional synthetic or by-product capacity comes on line in the next few years. Calcium chloride production using hypochloric acid is seen as a solution to an oversupply of hypochloric acid and the need for deep well disposal. In addition, Dow Chemical Corporation is considering converting its propylene oxide manufacturing process from the use of caustic soda to the use of hydrated lime. If the new conversion is made, the new process could generate approximately 225,000 tons of byproduct calcium chloride (U.S. Bureau of Mines, 1991).

5. The information included in Sections 4.3 and 5.3 of the Draft EIR/EIS, Sections 4.3 and 5.3 of the Supplement, and above, supports the conclusion of this EIR/EIS that the potential impact of the proposed project on the production of calcium chloride in the Bristol Dry Lake area is not significant.

Response 039-35

1. It is agreed that calcium chloride resource underlies the proposed site. However, according to BLM files, evidence of significant or long-term (locatable) mineral resource exploitation or exploration activities is not present in the site vicinity (i.e., closer than the Cargill wells). It is important to note that the mere presence of brine in the subsurface does not constitute a mineral deposit that warrants economic development or exploration interest.

Response 039-36

1. See Responses 039-9 and 039-12.

Response 039-37

1. The potential impact of the proposed landfill on the existing brine wells was further analyzed in Sections 4.3 and 5.3 of the Supplement.

Response 039-38

1. Please refer to Chapters 4.0 and 5.0 of the Supplement, and Responses 039-2, 039-3, and 039-5.

Response 039-39

1. See Response 039-12.

Response 039-40

1. Section 3.3 of the Supplement provided clarification of how alternatives to the proposed action were developed, evaluated and selected for detailed consideration in the EIR/EIS.

Response 039-41

1. Revised information regarding potential impacts to brines due to changes in water levels, hydraulic gradients and soil consolidation was included in Chapters 4.0 and 5.0 of the Supplement. Please also refer to Responses 039-2 and 039-6.

Response 039-42

1. The potential changes in water levels and gradients were addressed in Chapters 4.0 and 5.0 of the Supplement.

Responses 039-43

1. Subsequent settlement analysis has been conducted by Jacobs (1993b). Chapters 4.0 and 5.0 of the Supplement summarized the results of the subsequent study and the estimated cumulative settlement at the site due to both landfilling and ground water pumping.

Response 039-44

1. See Responses 039-06.

Response 039-45

1. Refer to Sections 4.3 and 5.3 of the Supplement for additional hydrogeologic characterization of the site and potential brine impacts.

Response 039-46

1. Refer to Sections 4.2 and 5.2 of the Supplement for additional hydrogeologic characterization of the site. The fact that static water levels are approximately the same in each piezometer simply reflects no vertical pressure gradients are present. If vertical gradients were present, they would be reflected as pressure differential which would be indicated by a head (ground water level) difference between the piezometers. Demonstration that the grout between the two piezometers effectively separated them is found in the pump test data, in which a level difference between the two appeared as the water table sensed by PC1A was drawn at a faster rate than that sensed by PC1B, which was effectively twice as far from the pumping well P8 than PC1A.

2. The piezometers are not connected with well PC8. Wells PC1A and PC1B were initially drilled prior to P8. During drilling of P8, the driller did not maintain a vertical boring, resulting in interception of the PC1A/PC1B well at depth. The P8 well was constructed at its original location and PC1A/PC1B was redrilled and constructed about 20 feet away from its original location. The well log dates reflect this redrilling, as the P8 well intercepting the original piezometer was drilled on February 9, 1991, and the relocated PC1 was drilled on February 8 and February 19, 1991.

Response 039-47

1. Sections 4.2 and 5.2 of the Supplement provided a discussion of additional analysis which has been conducted to determine the potential impact of the onsite ground water pumping. Results of a model simulation of the well in Section 9 at the northeast corner of the site indicated that adequate water supply was available to meet onsite water requirements and that the pumping would not interfere with the Cargill production wells (Rust, 1993b).

2. Subsequent to distribution of the Draft EIR/EIS, Rail•Cycle proposed that the well to supply onsite water needs, be relocated to the southeast corner of Section 33 (see Figure 3.1 of the Supplement). The anticipated radius of influence at this location relative to the previous location would reduce its potential impact on the Cargill wells.

Response 039-48

1. See Chapters 4.1 and 5.1 of the Supplement and Response 039-6 regarding potential foundation settlements.

2. Updated settlement analysis, which considers both the parameters of the 1991 Jacobs Engineering site characterization and a more recent soils analysis, was conducted (Jacobs, 1993b). Estimated settlement at the site was calculated from the primary and secondary consolidation of the underlying cohesive soils and immediate settlement of the sandy soils.

3. See Response 039-6 regarding potential differential settlement. Based on geophysical surveys, trenching and borings, subsurface soils at the site show evidence of interfingering of cohesionless soils (i.e., sands and gravels) with cohesive soils (i.e., silts and clays). This interfingering is a result of the development of the playa over time. The proposed site is located near the ancient shoreline of Bristol Dry Lake. The ancient geologic environment of the site dictates the interfingering of sediments. Periodic high stands of water on the dry lake during the late Pleistocene age are well documented in geologic literature. The time intervals between low and high stands of water are on the order of thousands of years in duration. Consequently, sedimentation processes are gradual, not abrupt, and they result in interfingering of alluvial (i.e., sands and gravels) and lake (i.e., silts and clays) sediments.

Response 039-49

1. Additional seismic analyses for the southwestern portion of the landfill, as recommended in this comment, has been undertaken since distribution of the Draft EIR/EIS and was documented in Sections 4.1 and 5.1 of the Supplement.

Response 039-50

1. See Response 039-03.

Response 039-51

1. See Response 039-12.

Response 039-52

1. As stated in Response 039-40, the criteria and evidence for selection of project alternatives were clarified in Section 3.3 of the Supplement. Potential alternative sites were identified based on specific siting, design and operational criteria for a rail-haul landfill. These criteria were applied to a regional map of the southern California desert to screen out unsuitable sites. Sites that met basic siting and operational criteria then underwent a second-tier review, which evaluated site-specific

environmental concerns. Based on this evaluation, specific alternative sites were selected to be evaluated in detail in the EIR/EIS.

2. The alternatives evaluated in the EIR/EIS were established after preliminary evaluation of potential rail-haul landfill sites identified by SCAG (1989) and other potential sites identified through the EIR/EIS. This analysis determined that the best location for a rail-haul regional landfill was in the Amboy area. Because the proposed action is located in that area, additional analysis was conducted to identify other potential sites in the Amboy/Cadiz area.

Response 039-53

1. As discussed in Section 3.3 of the Supplement. The alternative selection process screens potential sites based on their ability to first meet basic siting criteria fundamental to successful implementation of a rail-haul landfill. Construction of an access road would result in significant unavoidable impacts above and beyond those identified for the proposed site. Because an alternative site involving construction of an access road would not lessen the environmental effects of the proposed action, but would increase them, such sites were eliminated from detailed analysis due to their inability to meet CEQA and NEPA's intent that the analysis focus on alternatives capable of eliminating significant adverse environmental effects or reducing them to below a level of significance.

2. Areas between the alternative locales in the Amboy region were rejected due to significant environmental or siting flaws. Of the three locales that did not appear to be constrained by siting or obvious environmental flaws, Locales F, H, and I were eliminated due to the fact that the locales, or substantial portions of them, were proposed for protection under the California Desert Protection Act. Of the four potential sites in the Amboy area, sites A and B were eliminated due to greater potential impacts to the desert tortoise. Site D was eliminated because it is located within an area proposed for protection under the proposed California Desert Protection Act. Site C, the Cadiz Valley Alternative site, had no obvious "fatal flaws" and was selected for detailed analysis in the EIR/EIS.

California Communities Against Toxics
The Ward Valley Coalition
The Desert Rebellion Coalition
Don't Waste the Desert
Southern Kern Residents Against Pollution
Desert Citizens Against Pollution
3813 50th Street West, Rosamond, Ca. 93560
phone 805 256 2101
fax 805 256 0674

Feb. 28, 199

RECEIVED
MAR 1993
BY

Cert mail
P 319 621 342

County of San Bernardino Planning Dept.
385 N. Arrowhead Ave. 3rd Floor
San Bernardino, Calif. 92415-0182
Atten: Mr. Randy Scott

COMMENTS ON RAILCYCLE DRAFT EIR-EIS

I am commenting on this project as the Desert Representave for the California Communities Against Toxics Coalition. This group is made up of over 60 environmental, anti-toxic, anti-nuclear and peace groups from throughout California. Last year us desert dwellers started a new group called THE DESERT REBELLION --Don't Waste the Desert-- just to try to protect our desert from trash, nuclear and toxic projects.

2.4-93

THE WHOLE IDEA OF A HUGH ABOVE GROUND TRASH DUMP IN THE DESERT IS A DISASTER WAITING TO HAPPEN.

① The EIR-EIS is inadequate concerning the danger of the dump causing contamination of the underground aquifer. (3-52). When the liner leaks and the aquifer is contaminated, it will be very difficult or ② impossible to correct. The USEPA had engineering studies done on the best way to make a landfill. They wanted to know which kind of liners worked best. The conculsion was all liners perform worse than anyone suspected. Just regarding seam leakage we can expect a hole from between every 30feet to every 1,000 feet. Under best possible technology, leakage rates will be between 0.02 and 1.0 gal. per acre per day. A 10 acre landfil will leak 750 to 36,500 gallons over 10 years. The railcycle dump being so large will leak a staggering amount. ③ Leachate from Municipal dumps has the same toxicity as leachate from hazardous waste dumps, this fact was a conculsion from a study at Texas A&M. (see Rachel's Hazardous Waste News #90 attatched. ④ Benign substances such as margarine, mothballs, vinegar, ethyl alcohol and shoe polish can degrade and cause stress cracks in plastic liners.

CCAT to BLM Pg 2

⑤ Another deficiency in the EIR-EIS is inadequate details concerning the leachate system. Since leachate from this dump will be full of dangerous chemicals what happens if the system fails? It can fail for several reasons including:

1. silt or mud buildup
2. Microrganisms growth in the pipes.
3. Chemical reaction leading to precipation of minerals in the pipes.
4. The pipes becoming weakened by chemicals and colapsing under the weight of the garbage.

The EIR=EIS states, in one place, the leachate will be pumped into evaporation ponds and in another place it will be pumped out and trucked over to the active face of the dump and reintroduced, if allowed. (5-4-4) ⑥ This operation of loading, transporting and unloading the leachate is dangerous and may result in spills. This danger of ground contamination is not addressed at all in the document. ⑦ I am also very concerned about the leachate holding ponds. (5.7-7)states that VOC's would be released into the air from the evaporation ponds. It does not go into any details on this subject. ⑧ I want to know what happens to the solid material left in the ponds after evaporation? What will it be, how much and where will it be disposed of? ⑨ What type of lining will these ponds have and what type of system will be installed to see if they are leaking. The EIR-EIS did not discuss any of this so I could understand the whole leachate system.

⑩ Also concerning the underground aquifer,the salt wells in the vacinity of the dump will be in grave danger of contamination. The products of these wells are for human consumption and using a product mined that close to a dump is not feasible. Both the BLM Calif. Desert Plan and the San Bernardino County General Plan have provisions to protect mineral resources for beneficial uses. There may be well disruption from the weight of the dump or from leachate contamination.(5.3-2, 5.3-2 and 5.43-2) This information does not adequately discribe how these wells will be protected.

⑪ I am also very concerned about the potential contamination of the wells owned by The Cadiz Valley Land Co., being used for the irrigation of their large holdings of citrus trees and grapes. This operation is not discussed in the EIR-EIS --this company plans to expand their plantings in the future and they have a very considerable investment in their plantings. The leachate from the Railcycle dump is definitely a big danger to this operation and this needs to be investigated in detail. This concern for the Cadiz Valley Land crops, of course, also applies to the Cadiz alternative site as well as Bolo and the others.

⑫ There have been over 6,000 earthquakes in the desert area over the last few months. The above ground design of this dump is not feasible in an area of high earthquake activity. The earthquake experts are predicting that this area will continue to have earthquakes in the future often, including another large one of 7 scale or above. The EIR-EIS does not go into details to satisfy me concerning how the trash and sides of the dump would be kept stable in the next large quake. (5.2-1, 5.2-3). The trash will be settling and moving anyhow and add this to earthquake movement and you have a serious mess.

RACHEL'S HAZARDOUS WASTE NEWS #90

CCAT to BLM Pg3

Providing news and resources to the Movement for Environmental Justice -- August 15, 1988

2-4-94

LEACHATE FROM MUNICIPAL DUMPS HAS SAME TOXICITY AS LEACHATE FROM HAZARDOUS WASTE DUMPS

In a new study, researchers at Texas A&M University have compared leachate from municipal landfills with leachate from hazardous waste landfills and they report, "...There is ample evidence that the municipal waste landfill leachates contain toxic chemicals in sufficient concentration to be potentially as harmful as leachate from industrial waste landfills." Specifically, the Texas researchers compared leachate from several municipal landfills with leachate from the notorious Love Canal landfill (and other hazardous waste landfills, such as Kin-Buc in Edison, NJ) and they found the leachates similar in their cancer-causing potential.

Leachate is the liquid that is produced when rain falls on a landfill, sinks into the wastes, and picks up chemicals as it seeps downward. Industries creating "hazardous wastes" (as legally defined under federal law) may not send those wastes to municipal landfills, but must instead send them to special hazardous waste landfills.

When a new municipal landfill is proposed, advocates of the project always emphasize that "no hazardous wastes will enter this landfill." The Texas study shows that even though municipal landfills may not legally receive "hazardous" wastes, the leachate they produce is as dangerous as the leachate from hazardous waste landfills.

Dr. Kirk Brown and Dr. K.C. Donnelly at Texas A&M, authors of the new study, examined data on the composition of leachate from 58 landfills. The data they reviewed showed 113 different toxic chemicals in leachate from municipal landfills and 72 toxic chemicals in leachate from hazardous waste landfills. The abundance of toxics in municipal landfills probably occurs because the entire spectrum of consumer products ends up in municipal landfills, whereas hazardous waste landfills serve a limited number of industries within a region.

The actual source of the toxic chemicals in municipal landfills is not known precisely. Under federal law (RCRA Subtitle C) each "small quantity generator" can send up to 2640 pounds per year of legally-hazardous chemicals to municipal landfills. In 1980, the EPA [U.S. Environmental Protection Agency] estimated that 600,000 tons per year of legally-hazardous wastes were going to municipal dumps from 695,000 "small quantity generators."

Illegal dumping may be another source; illegal dumping is impossible to prevent entirely because someone bringing in a truckload of wastes may hide a few gallons, or a few barrels, of hazardous chemicals in the middle of the truckload. The higher the price of legal disposal, the more incentive people have to dump illegally. However, the most likely source of most of the toxic materials in municipal landfills is legally-disposed household products like paint solvents, oils, cleaning compounds, degreasing compounds, and pesticides. "In addition, the final depository of most of the products of our modern industrial society is the municipal waste landfill where the paints, plastics, and pharmaceuticals dissolve and degrade in the acidic anaerobic [oxygen-free] environment, thereby, releasing degradation products which may be even more toxic than the products from which they originated," say Brown and Donnelly.

The findings of Brown and Donnelly will come as no surprise to many researchers who have known for years that municipal leachate is as toxic as the leachate from industrial landfills. For example, in an article entitled, "Application of Hydrogeology to the Selection of Refuse Disposal Sites," Ronald A. Landon reported in 1969 in the journal *Ground Water* Vol. 7 (Nov.-Dec., 1969), pgs. 9-13, that "Leachate at its source, that is within the landfill, has concentrations and characteristics of many industrial wastes; and in many instances would be better treated as such a waste." (pg. 12)

What Brown and Donnelly have contributed is a quantitative analysis of the toxicity and the carcinogenic potential of leachates from the two types of landfills.

Brown and Donnelly conclude, "The risk calculations based on suspect carcinogens... indicate that the estimated carcinogenic potency for the leachate from some municipal landfills may be similar to the carcinogenic potency of the leachate from the Love Canal landfill."

In industrial landfill leachate, 32 chemicals cause cancer; 10 cause birth defects, and 21 cause genetic damage; in municipal landfill leachate, 32 chemi-

(over)

---

cals cause cancer, 13 cause birth defects, and 22 cause genetic damage.

The new study, "An Estimation of the Risk Associated with the Organic Constituents of Hazardous and Municipal Waste Landfill Leachates," appears in the journal, *Hazardous Waste and Hazardous Materials*, Vol. 5, No. 1 (Spring, 1988), pgs. 1-30. Request a free reprint from Dr. Kirk Brown, Soil and Crop Sciences Department, Texas A&M University, College Station, TX 77843. Phone (409) 845-5201.

WHAT WE MUST DO--PART 3
BFI: "WE'VE GOT THE UPPER HAND"

I'm dealing with
little behind in th
Baker blamed lo

Richard Oak
Ferris Industries
hauler, says, "A
ings with them,
hand."

Waste Manag
test results show
water are simply
tion. "Regulat
without independ
nel reports.

other countries, add $11.00. All payments in U.S. funds.

SUBSCRIPTION ORDER FORM

Name:

Address:

Environmental Research Foundatic
P.O. Box 3541
Princeton, NJ 08543-3541

ADDRESS CORRECTION REQUE

TO:

⑬ (5.7-8 The air emissions from the dump operations will be excessive over a long period of time. The EIR-EIS states it is impossible to know the extent of NO_x and reactive organic gasses. PM10 particulates and NO_x and ROGs will all increase due to the dump. (5.7-10) These facts are alarming and the EIR-EIS is not clear on amounts of total air air pollutants, specific air pollutants and what can be done to lessen these air emissions. ⑭ Air pollution does endanger people, animals and plants. Air pollution does affect crops and in addition to the above mentioned air pollutants the document mentions SO_x, CO. and toxic air emissions. These pollutants could blow over to the Cadiz Valley land orchards and vineyards and may decrease growth and deminish yields on this land. The EIR-EIS leaves all this out completely. (5.7-15). ⑮ I want to see the health effects on the workers on the Cadiz Valley farm considered. They work outside in dusty conditions, it is very hot in the summer, and now they are exposed fo air pollution for year after year. This is not a healthy situation.

⑯ The Railcycle dump operation would disturb a hugh land area and disrupt native vegetation and animals. The EIR-EIS states this is not a significant impact (7-1) Many birds and animals live in the vacinity of the Bolo and Cadiz Valley sites including the desert tortoise, bighown sheep, kit foxes, great horned owls, hummingbirds and Mojave fringe-towed lizards to name a few. This dump will eliminate many acres of habitat for these animals. Also there are many desert flowers and brush that grow on these sites and their habitat will be disrupted by this dump. The desert is a fragile place and disturbing large areas is unhealthy for the desert in general. What will be done to mitigate this land disruption?

⑰ We cannot afford to have the present populations of the endangered Desert Tortoise eliminated. This dump will have a 2 fold effect on the tortoise populations. The garbage will attract Ravens who prey on young tortoises and the land disruption. I am not clear from reading the EIR-EIS what will be done to discourage Ravens from being attracted to the dump. Setting aside 4800 acres for a dump will have important effects on the tortoise habitat in this area. The document works very hard to give the impression that the dump sites are not highly desirable tortoise habitat areas. The tortoises are a better judge of where they want to live than The Environmental Solutions Inc. WE CANNOT AFFORD TO LOOSE TORTOISES.

⑱ (5.10-2 Cultural resources discussion --Bolo and Oadiz Valley sites. The dump's effect on the Cadiz Valley site is unknown according to the EIR-EIS (5.10-2). This is totally outrageous and inadequate.

⑲ It is imperative for the environment that waste minimalization be required--not just encouraged. Establishing mega dumps is counter productive to this effort. A certain amount of trash would have to be delivered to make this a profitable operation. The EIR-EIR touches on source reduction but I do not see any discussion of reducing the waste stream by removing all green material such as grass clippings, gardening refuse, tree branches and leaves. These materials can be composted and kept out of landfills. They can be sold to greenhouses, nurseries and to agricultural operations to improve soils. This could offset costs too. Tree limbs and trunks can be chipped up and sold for mulch or cogeneration plant fuel. Even certain types of garbage can be composted commercially and sold.

⑳ If you remove a problem far away from the people responsible for the problem, it will not be dealt with. Big cities will not work hard at reducing their trash production if this trash is out of sight and out of mind out in the desert. Basic changes need to be made to reduce packaging such as no plastic jackets on grapes and berries not in plastic baskets. Some items come in 3 layers of plastic and don't need to come in plastic at all.

㉑ In addition to the desert end of this project there is the MRF end of the trash. Material recovery facilities would be necessary in several sites and the people in the City of Commerce do not want this facility in their community. Trucks and trains make noise and air pollution as well as other comtamination from the garbage. They are worried about toxic waste coming into the MRF and then being stored there when and if it is discovered. They do not want the problems brought in with ton after ton of gargage, odors, vermin and traffic.

Stormy Williams
Stormy Williams
For Calif. Communities Against Toxics.

DOCUMENT 040
CALIFORNIA COMMUNITIES AGAINST TOXICS
RESPONSE TO COMMENTS

Response 040-1

1. Supplemental information and analyses regarding the potential for ground water contamination was included in Chapters 4.0 and 5.0 of the Supplement.

2. As discussed in Chapter 3.0 of the Draft EIR/EIS and refined in Chapter 3.0 of the Supplement, numerous safeguards have been incorporated into the design of the proposed project to minimize the potential of gas and leachate migration from the landfill. These safeguards include an extensive landfill gas collection system that would include both horizontal (near the liner base) and vertical gas withdrawal pipes and a double-composite liner design. The inclusion of a state-of-the-art UZM system will provide early and sensitive leak detection. Because ground water movement under the site moves at an extremely slow rate (0.5 feet per day), there would be reasonable time to implement corrective action.

3. As discussed in Section 5.2 of the Supplement, in the event of a breach in the liner, control of the release would likely be through the addition of liquid and gas extraction wells. Construction of a grout curtain or cutoff wall downgradient of the release could totally isolate the release from contamination of ground water offsite. Because the contaminated area would be limited, the amount of ground water requiring pumping and treatment would be minimized.

Response 040-2

1. As noted in this comment, liners are likely to leak. Based on an exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However, the authors clearly make a distinction between liners and liner systems, and further, state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that, "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions."

2. As detailed in Chapter 3.0 of the Supplement, the proposed Bolo Station Landfill liner is a double-composite liner system and also includes a UZM system to provide 100 percent monitoring coverage under the liner.

Response 040-3

1. The potential for small quantities of hazardous leachate from municipal wastes is acknowledged. Hazardous components could represent a minor constituent of any leachate, and a release would be detected by the UZM system and downgradient monitoring wells within sufficient time to implement corrective action (see Sections 3.2.4 and 5.2 of the Supplement for details).

Response 040-4

1. See Response 040-03

Response 040-5

1. The proposed action would not depend on any individual system to prevent water degradation. As shown in Figure 3.2 of the Supplement, the proposed double-composite liner includes duplicate leachate collection systems. Further, the leachate collection system is designed such that leachate would be contained in its general area of production as shown in Figure 3.12 of the Draft EIR/EIS. As stated in Response 040-3, the proposed action includes a monitoring system that would provide sufficient time to implement corrective action in the event of a release.

Response 040-6

1. In the event that the regulatory agencies decline to allow the reintroduction of condensate and leachate into the waste unit, Rail•Cycle proposes that the liquids be disposed in a lined evaporation pond. Design refinements to the onsite landfill control systems since distribution of the Draft EIR/EIS were presented in Section 3.2.4 of the Supplement. Section 3.2.4.2 of the Supplement detailed the proposed leachate evaporation ponds that would be constructed in the event that reintroduction of leachate is not approved. The leachate evaporation ponds would be lined as detailed in Section 3.2.4.2 and Figure 3.3 of the Supplement. In addition, lysimeters would be installed beneath the leachate collection sumps to verify the integrity of liquid containment.

Response 040-7

1. Potential emissions of VOCs from evaporation or reintroduction of collected leachate and condensate were evaluated in the report *Bolo Station Landfill - Estimate of Leachate and Condensate Liquid*

Volumes and Volatile Organic Emissions from an Evaporation Pond (Rail•Cycle, 1992b). From analyses conducted for this report, VOC emissions from leachate and condensate evaporation and/or reintroduction were estimated to be approximately 4.7 tons per year after 50 years of landfill operation. Approximately 98 percent of the VOC emissions are from evaporation and/or reintroduction of condensate.

2. See Section 5.4.3.1.2 of the Supplement for details regarding the management of collected leachate and condensate.

Response 040-8

1. In the event liquids are disposed in a leachate evaporation pond, Rail•Cycle would analyze the liquids and the evaporite (sludge) in accordance with RCRA Subtitle C and California Health and Safety Code Title 22 procedures for classifying waste. If the evaporite is determined to be hazardous, the material will be handled, transported and disposed in an approved disposal facility or other approved hazardous waste treatment facility, in accordance with applicable state and federal standards.

2. Section 3.2.4.2 of the Supplement detailed the proposed liner system for the leachate collection ponds. A leachate collection system between the primary and secondary flexible membrane liner would act as a monitor in the event the primary liner is damaged. In addition, lysimeters would be installed beneath the collection ponds.

Response 040-9

1. See Response 040-6.

Response 040-10

1. Various studies have been conducted since the distribution of the Draft EIR/EIS to verify the characterization of the site and to confirm the project's potential to adversely impact Cargill's brine production operation. The results and conclusions of these studies were included in Chapters 4.0 and 5.0 of the Supplement.

Response 040-11

1. As discussed in Section 4.4.2.1.1 and shown in Figure 4.4.6 of the Draft EIR/EIS, the direction of ground water flow at the proposed site is south towards the Bristol Dry Lake. CLC's land and agricultural operations are located two to three miles east of the proposed site, and CLC's wells are located approximately five miles east of the site. With the southerly flow of ground water at the proposed site, CLC is not downgradient of the proposed landfill.

Response 040-12

1. The geophysical survey and trenching analysis to verify the presence or absence of active and potential active faults at the proposed site requested by the RWQCB was accomplished by Rail•Cycle (Jacobs, 1993a). This analysis confirmed the findings and conclusion of the previous Phase I and II geologic site characterization investigation that there are no Holocene faults at or tending towards the proposed site. For a complete discussion of the results of this verification analysis, see Sections 4.1 and 5.1 of the Supplement.

Response 040-13

1. Based on comments on the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement included refinement and reevaluation of the impacts and mitigation. MDAQMD has reviewed and submitted comments on the EIR/EIS, and have concurred with the primary finding that the proposed action would have a significant impact on air quality within the SEDAB.

2. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response 040-14

1. To respond to this comment, a report has been prepared addressing the potential for disease vectors to be attracted to agricultural crops in the vicinity of the proposed landfill. The report, *Agricultural Impact Report - The Potential Impact on Local Agriculture From the Proposed Rail•Cycle Bolo Station Landfill,* was prepared by Edwin Barnes, Ph.D., and summarizes experiences

reported by researchers at Cal Poly (Barnes, 1993). The report addresses the potential for insect/nuisance vectors to be introduced into agricultural zones and references the following agricultural operations conducted in proximity to currently operating landfills:

- Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile of the 2,800 ton per day County of Los Angeles Spadra Landfill.
- Privately owned and operated orchards situated in proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

2. The following discussion highlights the findings of the above report:

   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported health or safety impacts.
   - Negative effects, attributable to landfill operations on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Unpaved internal roads within the Cal Poly campus farm are responsible for more fugitive dust-related impacts on agricultural operations than fugitive dust emitted from the Spadra Landfill.
   - Citrus trees located 3 tenths of a mile from the Highgrove Landfill do not exhibit more dust or dirt than trees one mile away and in the middle of the orchards.
   - The Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

3. The following mitigation measures are recommended in the report to minimize potential agricultural impacts:

   - Implementation of fugitive dust control measures, including watering, use of dust abatement products, construction of berms, speed limit controls, and curtailing operations during occasional high winds. This mitigation measure is included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Installation of a pole and wire system or some other effective alternative for control of birds. This mitigation measure is included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

4. Based on the above findings and mitigation measures, the marketability of CLC produce is not expected to be affected by development and operation of the proposed landfill.

Response 040-15

1. See Response 040-14.

Response 040-16

1. As discussed in the Draft EIR/EIS, approximately 2,700 acres of the 4,800-acre Bolo Station site would be disturbed for the proposed landfill, and of this area approximately 300 acres could be permanently lost. The rest would be sequentially disturbed and then revegetated over the anticipated 60- to 100-year life of the landfill.

2. Criteria to determine what impacts, if any, to vegetation, wildlife, or land use would be significant were set forth in Sections 5.5, 5.6, and 5.14 of the Draft EIS/EIR. Impacts to vegetation would be considered significant in the event of:

   - Disturbance or destruction of protected or sensitive plant species.
   - Disturbance or destruction of habitat that supports protected or sensitive species.
   - Substantial diminishment of a plant community.

3. As discussed in Section 5.5.1 of the Draft EIR/EIS, the results of the impact analysis for the proposed action determined that none of these significant impacts would result from implementation of the proposed action. No protected or sensitive plant or animal species have been identified on the site. While the proposed action would disturb 2,700 acres over the life of the project, it would not substantially diminish specific plant communities that are widespread throughout the Mojave Desert. Further, it is

expected that revegetation would occur on all but 300 acres of the area disturbed for the landfill and appurtenant facilities. For these reasons, no significant unavoidable adverse impacts to vegetation are anticipated.

4. Impacts to wildlife would be considered significant in the event of:

   - Disturbance of protected or sensitive species or of habitat that support such species.
   - Substantial diminishment of habitat for wildlife species.
   - Substantial interference with the movement of resident or migratory wildlife species.

   None of these impacts would occur from implementation of the proposed action. Therefore, the mitigation measures proposed in this EIR/EIS are sufficient.

Response 040-17

1. As described in Section 4.6.2.1.4 of the Draft EIR/EIS, desert tortoise habitat at the Bolo Station site is poor. This conclusion was supported by a scientifically-conducted survey of the site. No tortoises were found, indicating that the site is not a desirable area for tortoises to live. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the biological Opinion was included in Appendix D of the Supplement.

2. As stated in Sections 3.3.2.1.4, 5.6.5.1, and 5.8.1.1.5 of the Draft EIR/EIS, standard landfill operations would be employed (i.e., compaction of waste at the working face, periodic application of cover material during the day, maintaining a small working face, and an active litter control program) that are expected to be effective in limiting the attractiveness of the site to ravens and other birds. In the event ravens or other bird species are attracted to the site, various measures will be implemented on an as-needed basis to prevent bird populations from becoming established at the landfill. Section 5.6.5 of the Draft EIR/EIS included specific mitigation measures that would be implemented if ravens or other birds are found to be attracted to the site. These measures included, but are not necessarily limited to, the use of an overhead nylon line grid system (bird wires), distress tapes, propane cannons, and racket bombs.

3. In addition, Rail•Cycle, in consultation with BLM and USFWS, initiated a baseline raven study that included an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys during this 12-month period documented current raven (as well as other bird species) populations and usage patterns in the study area. Baseline data will be compared to data collected during the operation of the proposed landfill. If comparison of data finds that ravens are being attracted to the site or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented at the landfill in consultation with BLM, USFWS, and CDFG.

Response 040-18

1. The level of analysis of alternative sites was developed pursuant to the requirements of CEQA and NEPA to determine if a reasonable and feasible alternative site is available that would reduce or eliminate significant impacts associated with the proposed action. Neither CEQA or NEPA require that the analysis of alternative sites be at the same level of analysis as for the proposed action.

2. Archival data search and a review of existing literature and historic maps were conducted for the Cadiz Valley Alternative site. BLM and the County, in consultation, agreed that this level of investigation was appropriate for the characterization of the cultural environment of the alternative site presented in the Draft EIR/EIS, and directed the EIR/EIS preparer in this regard. Should the alternative site be selected, mitigation measures presented for the Cadiz Valley Alternative site in Section 5.10.5.2 of the Draft EIR/EIS addressed the performance of a thorough field inventory, resource evaluation, and subsequent steps to satisfy regulatory requirements for cultural resources.

Response 040-19

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 040-20

1. As stated in Response 040-19, it is acknowledged that provision of and commitment to alternative waste management practices is an important goal. However, construction and operation of the proposed landfill would in no way hinder cities' and counties' ability to meet AB 939 diversion requirements.

Response 040-21

1. To enhance public understanding of how a MRF might serve the proposed action, a description of a typical MRF was provided in Section 3.2.2 of the Draft EIR/EIS. However, inclusion of this general description should not be construed to mean that construction and operation of MRFs is a part of the proposed action.

2. MRFs would be subject to their own site-specific permitting and environmental review. This EIR/EIS does evaluate impacts related to the transfer of solid waste by rail to the landfill. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs to the Bolo Station landfill evaluated in Sections 5.7, 5.8, 5.12 and 5.13 of the Draft EIR/EIS, respectively. Additional information regarding transportation and noise impacts along the rail-haul route was included in Sections 5.4 and 5.5 of the Supplement.

California Communities Against Toxics
The Ward Valley Coalition
The Desert Rebellion Coalition
Don't Waste the Desert
Southern Kern Residents Against Pollution
Desert Citizens Against Pollution
3813 50th Street West, Rosamond, Ca. 93560
phone 805 256 2101
fax 805 256 0674

Feb. 28, 1993

Aileen Deardorff
San Bernardino County Planning Dept.
385 N. Arrowhead Ave.
San Bernardino, Ca. 92415-0182

COMMENTS ON RAILCYCLE DRAFT EIR-EIS

I am commenting on this project as the Desert Representative for the California Communities Against Toxics Coalition. This group is made up of over 60 environmental, anti-toxic, anti-nuclear and peace groups from throughout California. Last year us desert dwellers started a new group called THE DESERT REBELLION --Don't Waste the Desert-- just to try to protect our desert from trash, nuclear and toxic projects.

2.4-101

THE WHOLE IDEA OF A HUGH ABOVE GROUND TRASH DUMP IN THE DESERT IS A DISASTER WAITING TO HAPPEN.

The EIR-EIS is inadequate concerning the danger of the dump causing contamination of the underground aquifer. (3-52). When the liner leaks and the aquifer is contaminated, it will be very difficult or impossible to correct. The USEPA had engineering studies done on the best way to make a landfill. They wanted to know which kind of liners worked best. The conculsion was all liners perform worse than anyone suspected. Just regarding seam leakage we can expect a hole from between every 30feet to every 1,000 feet. Under best possible technology, leakage rates will be between 0.02 and 1.0 gal. per acre per day. A 10 acre landfil will leak 750 to 36,500 gallons over 10 years. The railcycle dump being so large will leak a staggering amount. Leachate from Municipal dumps has the same toxicity as leachate from hazardous waste dumps, this fact was a conculsion from a study at Texas A&M. (see Rachel's Hazardous Waste News #90 attatched. Benign substances such as margarine, mothballs, vinegar, ethyl alcohol and shoe polish can degrade and cause stress cracks in plastic liners.

RACHEL'S HAZARDOUS WASTE NEWS #90

attachment

Providing news and resources to the Movement for Environmental Justice – August 15, 1988

LEACHATE FROM MUNICIPAL DUMPS HAS SAME TOXICITY AS LEACHATE FROM HAZARDOUS WASTE DUMPS

In a new study, researchers at Texas A&M University have compared leachate from municipal landfills with leachate from hazardous waste landfills and they report, "...There is ample evidence that the municipal waste landfill leachates contain toxic chemicals in sufficient concentration to be potentially as harmful as leachate from industrial waste landfills." Specifically, the Texas researchers compared leachate from several municipal landfills with leachate from the notorious Love Canal landfill (and other hazardous waste landfills, such as Kin-Buc in Edison, NJ) and they found the leachates similar in their cancer-causing potential.

Leachate is the liquid that is produced when rain falls on a landfill, sinks into the wastes, and picks up chemicals as it seeps downward. Industries creating "hazardous wastes" (as legally defined under federal law) may not send those wastes to municipal landfills, but must instead send them to special hazardous waste landfills.

When a new municipal landfill is proposed, advocates of the project always emphasize that "no hazardous wastes will enter this landfill." The Texas study shows that even though municipal landfills may not legally receive "hazardous" wastes, the leachate they produce is as dangerous as the leachate from hazardous waste landfills.

Dr. Kirk Brown and Dr. K.C. Donnelly at Texas A&M, authors of the new study, examined data on the composition of leachate from 58 landfills. The data they reviewed showed 113 different toxic chemicals in leachate from municipal landfills and 72 toxic chemicals in leachate from hazardous waste landfills. The abundance of toxics in municipal landfills probably occurs because the entire spectrum of consumer products ends up in municipal landfills, whereas hazardous waste landfills serve a limited number of industries within a region.

The actual source of the toxic chemicals in municipal landfills is not known precisely. Under federal law (RCRA Subtitle C) each "small quantity generator" can send up to 2640 pounds per year of legally-hazardous chemicals to municipal landfills. In 1980, the EPA [U.S. Environmental Protection Agency] estimated that 600,000 tons per year of legally-hazardous wastes were going to municipal dumps from 695,000 "small quantity generators."

Illegal dumping may be another source; illegal dumping is impossible to prevent entirely because someone bringing in a truckload of wastes may hide a few gallons, or a few barrels, of hazardous chemicals in the middle of the truckload. The higher the price of legal disposal, the more incentive people have to dump illegally. However, the most likely source of most of the toxic materials in municipal landfills is legally-disposed household products like paint solvents, oils, cleaning compounds, degreasing compounds, and pesticides. "In addition, the final depository of most of the products of our modem industrial society is the municipal waste landfill where the paints, plastics, and pharmaceuticals dissolve and degrade in the acidic anaerobic [oxygen-free] environment, thereby, releasing degradation products which may be even more toxic than the products from which they originated," say Brown and Donnelly.

The findings of Brown and Donnelly will come as no surprise to many researchers who have known for years that municipal leachate is as toxic as the leachate from industrial landfills. For example, in an article entitled, "Application of Hydrogeology to the Selection of Refuse Disposal Sites," Ronald A. Landon reported in 1969 in the journal *Ground Water* Vol. 7 (Nov.-Dec., 1969), pgs. 9-13, that "Leachate at its source, that is within the landfill, has concentrations and characteristics of many industrial wastes; and in many instances would be better treated as such a waste." (pg. 12)

What Brown and Donnelly have contributed is a quantitative analysis of the toxicity and the carcinogenic potential of leachates from the two types of landfills.

Brown and Donnelly conclude, "The risk calculations based on suspect carcinogens... indicate that the estimated carcinogenic potency for the leachate from some municipal landfills may be similar to the carcinogenic potency of the leachate from the Love Canal landfill."

In industrial landfill leachate, 32 chemicals cause cancer; 10 cause birth defects, and 21 cause genetic damage; in municipal landfill leachate, 32 chemicals cause cancer, 13 cause birth defects, and 22 cause genetic damage.

The new study, "An Estimation of the Risk Associated with the Organic Constituents of Hazardous and Municipal Waste Landfill Leachates," appears in the journal, *Hazardous Waste and Hazardous Materials*, Vol. 5, No. 1 (Spring, 1988), pgs. 1-30. Request a free reprint from Dr. Kirk Brown, Soil and Crop Sciences Department, Texas A&M University College Station, TX 77843. Phone (409) 845-5201.

WHAT WE MUST DO--PART 3
BFI: "WE'VE GOT THE UPPER HAND"

[Note: This is the third part of our ongoing series, What We Must Do, in which we are developing an overview of the toxic chemical problem, and then presenting a range of solutions. If you have ideas that you believe would help solve the problem of toxics, please send it to us for consideration.]

Five reporters with the Ft. Lauderdale (Fla) *Sun Sentinel* investigated the nation's trash haulers in 22 states in 1987 (see *RHWN #88* and *RHWN #89*), and reported last December that the waste industry is so aggressive and has grown so large that it often outstrips the ability of government to control it.

The *Sun Sentinel* team wrote, "Officials concede they often are outflanked by the technical expertise the firms can muster, as well as the complexity of affixing blame for causing contamination."

"These companies often understand the regulations better than the regulators," said Steven W. Sisk, an EPA [U.S. Environmental Protection Agency] investigator. John Baker, manager of environmental programs for Waste Management, the largest U.S. waste hauler, says, "In EPA, every two years I'm dealing with new people. The agencies are a little behind in the technical expertise," he said. Mr. Baker blamed low salaries for the turnover.

Richard Oakley, a vice president of Browning-Ferris Industries [BFI], the nation's second-largest hauler, says, "A lot of times when we go for meetings with them, technically we've got the upper hand."

Waste Management and BFI routinely claim that test results showing they've contaminated groundwater are simply "lab error," not evidence of pollution. "Regulators usually accept these claims without independent verification," the *Sun Sentinel* reports.

Another serious problem is the "revolving door" which permits staff members of regulatory agencies to take employment with the industries they have been regulating. For example, the former director of EPA, William Ruckelshaus, is now chief executive officer of BFI. As we will document in coming weeks, it has become routine for regulatory personnel to take jobs with the industries they have been regulating.

This practice raises serious questions about the quality of the regulatory performance that agency personnel will deliver, knowing that their "adversary" today may well be their employer tomorrow. If a polluter and a regulator are negotiating over an interpretation of a regulation, or about responsibility for cleanup of a leaking dump site, large sums of money are at stake. Is a regulator going to press hard for stiff fines, and perhaps for a penalty that goes beyond mere fines, if that regulator is looking at a potential employer across the negotiating table? It seems unlikely.

[We'll mail you all 25 stories from the *Sun Sentinel* for $12.00.]

Rachel's Hazardous Waste News is published weekly by Environmental Research Foundation, P.O. Box 3541, Princeton, NJ 08543. Editor: Peter Montague, Ph.D.; Associate Editor: Maria B. Pellerano; Assistant Editor: Annette Eubank; West Coast Editor: Tim Montague; subscriptions: Abigail Allen, Office Manager. Subscription rates: $25 per year for individuals and citizen groups, $50 for government agencies, $8 for students and seniors, $250 for businesses and professionals. In Canada and Mexico, add $4.00; in all other countries, add $11.00. All payments in U.S. funds.

Printed on 100% Recycled Paper

SUBSCRIPTION ORDER FORM

Name:

Address:

City:

State and Zip:

Environmental Research Foundation
P.O. Box 3541
Princeton, NJ 08543-3541

ADDRESS CORRECTION REQUESTED

TO:

FIRST-CLASS MAIL
U.S. POSTAGE
PAID
Princeton, NJ
Permit No. 434

Another deficiency in the EIR-EIS is inadequate details concerning the leachate system. Since leachate from this dump will be full of dangerous chemicals what happens if the system fails? It can fail for several reasons including:

1. silt or mud buildup
2. Microrganisms growth in the pipes.
3. Chemical reaction leading to precipation of minerals in the pipes.
4. The pipes becoming weakened by chemicals and colapsing under the weight of the garbage.

The EIR=EIS statea, in one place, the leachate will be pumped into evaporation ponds and in another place it will be pumped out and trucked over to the active face of the dump and reintroduced, if allowed. (5-4-4) This operation of loading, transporting and unloading the leachate is dangerous and may reault in spills. This danger of ground contamination is not addressed at all in the document. I am also very concerned about the leachate holding ponds. (5.7-7)states that VOC's would be released into the air from the evaporation ponds. It does not go into any details on this subject. I want to know what happens to the solid material left in the ponda after evaporation? What will it be, how much and where will it be disposed of? What type of lining will these ponds have and what type of system will be installed to see if they are leaking. The EIR-EIS did not discuss any of this so I could understand the whole leachate system.

Also concerning the underground aquifer, the salt wells in the vacinity of the dump will be in grave danger of contamination. The products of these wells are for human consumption and using a product mined that close to a dump is not feasible. Both the BLM Calif. Desert Plan and the San Bernardino County General Plan have provisions to protect mineral resourcea for beneficial uses. There may be well disruption from the weight of the dump or from leachate contamination.(5.3-2, 5.3-2 and 5.43-2) This information does not adequately discribe how these wells will be protected.

I am also very concerned about the potential contamination of the wells owned by The Cadiz Valley Land Co., being used for the irrigation of their large holdings of citrus trees and grapes. This operation is not discussed in the EIR-EIS --this company plans to expand their plantings in the future and they have a very considerable investment in their plantings. The leachate from the Railcycle dump is definitely a big danger to this operation and this needs to be investigated in detail. This concern for the Cadiz Valley Land crops, of course, also applies to the Cadiz alternative site as well as Bolo and the others.

There have been over 6,000 earthquakes in the desert area over the last few months. The above ground design of this dump is not feasible in an area of high earthquake activity. The earthquake experts are predicting that this area will continue to have earthquakes in the future often, including another large one of 7 scale or above. The EIR-EIS does not go into details to aatisfy me concerning how the trash and sides of the dump would be kept stable in the next large quake. (5.2-1, 5.2-3). The trash will be settling and moving anyhow and add this to earthquake movement and you have a aerious mess.

(5.7-8 The air emissions from the dump operations will be excessive over a long period of time. The EIR-EIS states it is impossible to know the extent of NO_x and reactive organic gasses. PM10 particulates and NO_x and ROGs will all increase due to the dump. (5.7-10) These facts are alarming and the EIR-EIS is not clear on amounts of total air air pollutants, specific air pollutants and what can be done to lessen these air emissions. Air pollution does endanger people, animals and plants. Air pollution does affect crops and in addition to the above mentioned air pollutanta the document mentions SO_x, CO. and toxic air emissions. These pollutants could blow over to the Cadiz Valley land orchards and vineyards and may decrease growth and deminish yields on this land. The EIR-EIS leaves all this out completely. (5.7-15). I want to see the health effects on the workers on the Cadiz Valley farm considered. They work outside in dusty conditions, it is very hot in the summer, and now they are exposed to air pollution for year after year. This is not a healthy situation.

The Railcycle dump operation would disturb a hugh land area and disrupt native vegetation and animala. The EIR-EIS states this is not a significant impact (7-1) Many birds and animals live in the vacinity of the Bolo and Cadiz Valley sites including the desert tortoise, bighown sheep, kit foxes, great horned owls, hummingbirds and Mojave fringe-towed lizards to name a few. This dump will eliminate many acres of habitat for these animals. Also there are many desert flowers and brush that grow on theae sitea and their habitat will be disrupted by this dump. The desert is a fragile place and disturbing large areas is unhealthy for the desert in general. What will be done to mitigate this land disruption?

We cannot afford to have the present populations of the endangered Desert Tortoise eliminated. This dump will have a 2 fold effect on the tortoise populations. The garbage will attract Ravens who prey on young tortoises and the land disruption. I am not clear from reading the EIR-EIS what will be done to discourage Ravens from being attracted to the dump. Setting aside 4800 acres for a dump will have important effects on the tortoise habitat in this area. The document works very hard to give the impression that the dump sites are not highly desirable tortoise habitat areas. The tortoises are a better judge of where they want to live than The Environmental Solutions Inc. WE CANNOT AFFORD TO LOOSE TORTOISES.

(5.10-2 Cultural resources discussion --Bolo and Dadiz Valley sites. The dump's effect on the Cadiz Valley site is unknown according to the EIR-EIS (5.10-2). This is totally outrageous and inadequate.

It is imperative for the environment that waste minimalization be required--not just encouraged. Establishing mega dumps is counter productive to this effort. A certain amount of trash would have to be delivered to make this a profitable operation. The EIR-EIR touches on source reduction but I do not see any discussion of reducing the waste stream by removing all green material such as grass clippings, gardening refuse, tree branches and leaves. These materials can be composted and kept out of landfills. They can be sold to greenhouses, nurseries and to agricultural operations to improve soils. This could offset costs too. Tree limbs and trunks can be chipped up and sold for mulch or cogeneration plant fuel. Even certain types of garbage can be composted commercially and sold.

If you remove a problem far away from the people responsible for the problem, it will not be dealt with. Big cities will not work hard at reducing their trash production if this trash is out of sight and out of mind out in the desert. Basic changes need to be made to reduce packaging such as no plastic jackets on grapes and berries not in plastic baskets. Some items come in 3 layers of plastic and don't need to come in plastic at all.

In addition to the desert end of this project there is the MRF end of the trash. Material recovery facilities would be necessary in several sites and the people in the City of Commerce do not want this facility in their community. Trucks and trains make noise and air pollution as well as other comtamination from the garbage. They are worried about toxic waste coming into the MRF and then being stored there when and if it is discovered. They do not want the problems brought in with ton after ton of gargage, odors, vermin and traffic.

Stormy Williams
Stormy Williams

For Calif. Communities Against Toxics.

DOCUMENT 041
CALIFORNIA COMMUNITIES AGAINST TOXICS
RESPONSE TO COMMENTS

Response 041-1

1. This is the same letter that is designated as Document 040 in this Final EIR/EIS. The only difference between the two letters is the person to whom the letter is addressed. Document 040 and 041 are both included in the EIR/EIS for purposes of completeness of the administrative record.

2. For responses to comments raised in Document 041, see the responses to Document 040.

042

Desert Citizens Against Pollution

3 March 1993

DCAP
P.O. Box 492
Lancaster, CA 93584

San Bernardino County Planning Dept.
Attn: Randy Scott
385 N. Arrowhead Ave., Third Floor
San Bernardino, CA 92415-0182

re: Rail Cycle-Bolo Station Landfill, continuing disregard for desert resources

Dear Mr. Randy Scott:

The consideration of the desert as a dumping ground by populated and therefore politically influential demographic entities must stop. Since the plan proposed in the 50's to drill giant holes in the mountains, install fans, and rid L.A. of smog; to this proposal, the sparsely populated desert must struggle against the forces of greed and idiocy to sustain the quality of life many of us desert dwellers seek.

The only answer to the massive problem of solid waste disposal is cultural change and source reduction: not looking for cheap land and huge energy and transportation costs to dump it outback where few will care. ①

Winds are notable in the desert for their high velocity and vertical component that make soaring aircraft a recreation pursuit. This vertical component is not considered in the EIR. ②

But the primary issue is the cost-risk benefit analysis that won't stand the test of time. We simply do not have the right to despoil the lands benefit and use to future generations.

I have been to this area seen the agricultural resources that exist downwind of this site, and the habitat for a wide variety of desert wildlife.

I don't want to have to continue writing comments for such outlandish and inane proposals! Planners, plan and make reasonable sustainable proposals, no more dumping in the desert!

Sincerely,

Joe Blackburn, for the Desert Citizens Against Pollution

DOCUMENT 042
DESERT CITIZENS AGAINST POLLUTION - JOE BLACKBURN
RESPONSE TO COMMENTS

Response 042-1

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because the proposed landfill would only accept waste that has already undergone source reduction and recycling as specified by AB 939.

Response 042-2

1. Bolo Station is in an area that experiences lower velocity winds than various other areas in which landfills are operated in conformance with the litter control conditions of their permits. For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County, California (data from January through December 1991) is provided below:

WIND SPEED HIGHER THAN:	BOLO STATION	ALTAMONT
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

2. The Altamont Landfill is located in an area of relatively constant wind velocity and has attracted wind powered electrical generating facilities. According to WMNA, this landfill is operated in compliance with the conditions of its SWFP including litter control. The Altamont Landfill is permitted to receive up to 11,500 tons of waste per day and typically receives 6,000 tons of waste on a daily basis. The majority of waste is transported to the site by transfer trailers that are tipped at the working face using a portable tipper similar to those proposed at Bolo Station.

3. Litter control measures for the proposed Bolo Station Landfill were discussed in Section 3.3.2.1.3 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected onsite.

4. An important point to note is that by primarily accepting post-recycled waste or waste that has been processed through a MRF, as will be required as a condition of approval by the County, a significant portion of the primary source of litter

at most landfills (i.e., paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the litter control measures that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

5. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program that shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high wind velocity. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

6. In addition, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) in which Rail•Cycle shall determine (in conjunction with the LEA and CIWMB) the optimum size of the working face for anticipated daily waste volumes to minimize litter.

THE CALIFORNIA NATIVE PLANT SOCIETY

March 1, 1993

County of San Bernardino, Planning Department
385 N. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182
Attn: Mr. Randy Scott

Re: Comments on DEIR/EIS Rail-Cycle-Bolo Station Landfill

Dear Mr. Scott,

I would like to address the impacts to existing vegetation and revegetation aspect of the landfill proposal. It is interesting how this project exemplifies a somewhat contradictory position regarding native plant issues: the project proponents acknowledge that destruction or disturbance to native plant communities is a significant impact, but then propose a mitigation which is unproved, if not, unfeasible. The revegetation proposal does not make sense, and basic data which might support such a plan are not presented.

Feasibility of Mitigation Measures section (5.5.6.1) states that "a topsoil layer in excess of 1 foot may be necessary to ensure that the root structure of desert shrubs, such as creosote, does not breach the clay cap." It seems to be common sense that most desert shrubs would have deep roots in order to reach down to get moisture. What kind of perennial shrubs, without irrigation, could live in such conditions? Have any plants ever survived under such conditions as proposed for revegetation? ①

Section 5.5.6.2 states that "Mitigations for this impact include using a seed mix including native plants that may not include some desert shrubs." What does this mean? Does this mean that the plants to be used for revegetation will include all of the known existing species on the site except for certain shrubs? If so, which of these have shallow root depths? If this information is not known, then the entire revegetation plan must be considered pure speculation. Moreover, once again a desert revegetation plan is proposing spreading seed. This has never been shown to be a successful method of revegetation in the desert. Why should this one be different? ②

Since wind is a key physical factor in the desert environment, it is apparent that the soil will blow away, revealing the clay cap (Section 5.5.6.3)? How will this affect the revegetation? It is proposed that lost topsoil will be replaced, but will vegetation also be continually replaced? This important concern needs to be mentioned in the mitigation for visual resources section, since it is likely that the revegetation plan won't work. ③

Section 5.5.1.4 states that "Revegetated areas are expected to require 50 to 100 years after completion of a landfill cell to establish a functional perennial plant community that approaches predisturbance plant cover, density, and species composition." This statement stretches theory to fantasy. Without much data to support it, a good guess might be that it takes 50 to 100 years to revegetate an area in the desert; but what is proposed in this project is to revegetate on a one-foot layer of topsoil over a clay cap baking in the desert sun. ④

Page 1 of 2

DEDICATED TO THE PRESERVATION OF CALIFORNIA NATIVE FLORA

Moreover, that Section goes on to state "Since the last landfill cell would be completed at year 60 or 100, it is expected to take from 100 to 200 years for the plant community to become re-established." The word "re-established" implies that something that used to be there would be recreated; but it shouldn't be used in this case, because what used to be there - native plant communities - will be replaced by this "perennial plant community" which would "approach" (what ever that means) predisturbance plant cover, density and species composition. The point here is that the project fails to acknowledge clearly that there is no evidence which might even slightly support that, without irrigation, a perennial plant community could be created on a layer of soil of the clay cap of a landfill. ⑤

What mitigation is proposed for the 300 acres of vegetation that would be permanently lost? Perhaps a compensating revegetation effort in an area that needs it would be a good idea. To carry the idea further, since it is highly unlikely that revegetation would work on this clay capped landfill, it would be much more useful and valuable to the desert that the proponents of this project actually do their revegetation now, on disturbed lands in the Desert District. In this way, the good is generated today under the watchful eyes of those who have a current interest in this project. Wouldn't it be better to execute an efficient, experimental revegetation effort now in an area that could be significantly improved, in order to finally determine what methods can be successfully implemented to facilitate desert revegetation? ⑥

Section 5.5.7.1 states that "no significant unavoidable adverse impacts to vegetation are expected to occur as a result of the proposed action." The project describes 5 scrub communities: creosote bush scrub, creosote bush-allscale scrub, desert dune scrub, desert wash scrub, and desert saltbush scrub. How much of an impact on the entire plant community will result in the reduction of portions of each? In other words, a certain percentage of each of the five mentioned communities will be destroyed; isn't the destruction of a portion of a plant community a significant unavoidable impact? ⑦

What about the impact of weeds which will be likely to grow in the disturbed soil above the clay cap? It is likely that weeds will completely invade the new top soil areas (especially if overhead irrigation is used), and will spread into adjacent areas and along the sides of all roadways leading away from the landfill. Weeds around the site during construction phases, landfill operations, and after completion, must be eradicated on site: vehicle travel will spread any on site weeds to outlying areas. The impact of weeds emanating from a site in the desert for 100 years will have a significant impact! ⑧

Thank you very much for the opportunity to comment.

Sincerely,

Steve Hartman

Steve Hartman
4444 Longridge Avenue
Sherman Oaks, CA 91423

Page 2 of 2

DOCUMENT 043
THE CALIFORNIA NATIVE PLANT SOCIETY
RESPONSE TO COMMENTS

Response 043-1

1. In response to this and other comments on the Draft EIR/EIS, the topsoil layer over the final cover of the landfill was increased to 2 to 3 feet, from 1-foot described in the Draft EIR/EIS. This change was made after consultation with NPS, Joshua Tree National Monument and was described in Section 3.2.7 of the Supplement.

2. A mitigation measure has been included in this EIR/EIS (see Table S.2) that requires Rail•Cycle to develop a detailed revegetation plan for the proposed landfill in consultation with NPS, Joshua Tree National Monument. This mitigation measure includes a requirement that Rail•Cycle establish a nursery at Bolo Station for germination and growth of native shrubs. These nursery-grown native plants would be transplanted to the closed cell and planted in an island configuration, similar to the surrounding vegetated communities. Plants would be artificially watered for one to two months. If drought conditions exist, the irrigation would continue for several months, thereby enabling the shrubs' root systems to become established. Overhead irrigation may be temporarily used on the landfill sideslopes to assist in the initial establishment of the revegetation; however, only a drip irrigation system would be used on the top slopes of the landfill. If long-term irrigation is required on the sideslopes, a drip irrigation system shall be installed.

Response 043-2

1. As discussed in Response 043-1, based on this and other comments, a revised revegetation plan would be developed in consultation with the NPS, Joshua Tree National Monument. This revised plan would rely on transplanting of nursery-grown native plants using methods developed by NPS and does not rely upon spreading seeds.

Response 043-3

1. It is acknowledged that wind is a key factor in the desert environment. Therefore, slopes on the closed landfill cells would be designed to minimize the effect of wind erosion. The topsoil layer of the final cover would be contoured with ridges and depressions with plant islands to collect wind-drifted soils. Soils would be augmented with wood chip or straw mulch to control erosion. If severe erosion occurs, topsoil will be replaced and protective devices, natural and man-made (i.e., woody plant debris, wood chips, logs and tree limbs, bales of straw, sand drift fences, etc.) would be used to control drifting soils, thereby helping to reestablish the annual and perennial plants.

Response 043-4

1. See Response 043-1.

Response 043-5

1. See Response 043-1.

Response 043-6

1. The final disposition of the initial 300 acres that would be disturbed for the rail yard and offloading facility, roads, buildings, and appurtenant structures would be determined later in the project life. Regarding the suggestion made by this comment that compensation should be provided for the loss of this 300 acres, the three sections (1,920 acres) of private land that would be exchanged by Rail•Cycle for two and one-half sections (1,600) of federal land within the proposed project site is a form of advance compensation.

Response 043-7

1. Section 5.5 of the Draft EIR/EIS defined impacts to vegetation as being significant if they would result in one or more of the following:
    - Disturbance or destruction of protected or sensitive plant species.
    - Disturbance or destruction of habitat that supports protected or sensitive species.
    - Substantial diminishment of a plant community.

2. As discussed in Section 5.5.1 of the Draft EIR/EIS, the results of the impact analysis for the proposed action determined that none of these potential impacts would result from implementation of the proposed action. No protected or sensitive plant or animal species have been identified on the site. While the proposed action would disturb 2,700 acres over the life of the project, it would not substantially diminish specific plant communities that are widespread throughout the Mojave Desert. Further, it is

expected that revegetation would occur on all but 300 acres of the area disturbed for the landfill and appurtenant facilities (see Response 043-1). For these reasons, no significant unavoidable adverse impacts to vegetation are anticipated.

Response 043-8

1. The replacement of the topsoil removed prior to excavation for new landfill cells, would provide seeds of annual and some perennial plants. The topsoil also would provide natural bacteria, molds, and other microscopic organisms that help to naturally control foreign species of plants.

2. Contrary to this comment, native plants that are part of desert plant communities are not considered weeds. A plant is considered a "weed" only when it is out of its natural environment. Thus, plants distributed by wind, vehicle disturbance, and other modes of plant seed transportation are not necessarily weeds. Neither is their establishment necessarily considered to be a significant impact.

3. As noted in Response 043-1, overhead irrigation would only be used on a temporary basis on the landfill sideslopes to assist in the initial establishment of the revegetation. Only a drip irrigation system would be used on the top slopes of the landfill. If long-term irrigation is required on the sideslopes a drip system shall be installed.

044

RECEIVED
1993
BY

THE DESERT PROTECTIVE COUNCIL, INC.
A NON-PROFIT ORGANIZATION

To safeguard for wise and reverent use by this and succeeding generations those desert areas of unique scenic, scientific, historical, spiritual and recreational value and to educate by all appropriate means children and adults to a better understanding of the desert.

P.O. BOX 2312 • VALLEY CENTER • CALIFORNIA 92082

DESERT PROTECTIVE COUNCIL
ADVISORY PANEL

SYLVIA BROADBENT
Professor of Archaeology
DOROTHY COWPER
Archaeologist
PETE DANGERMOND
Park Consultant
MARY DEDECKER
Botanist
BETTY FORGEY
Desert Tortoise Activist
MICHAEL FROME
Author
AUGUST FRUGE
Conservationist
WILBUR MAYHEW
Professor of Zoology
ART MONTANA
Professor of Earth Sciences
KAREN SAUSMAN
BioPark Director
GENNY SMITH
Editor & Publisher
RICHARD SPOTTS
Wildlife Advocate
ROBERT STEBBINS
Herpitologist
FRANK VASEK
Professor of Botany
LEONARD VINCENT
Professor of Biology
STANLEY WELSH
Museum Curator
FRANK WHEAT
Attorney
HOWARD WILSHIRE
Geologist

DATE: march 1, 1993

Rail-Cycle Bolo Station
Landfill

Planning Department
County of San Bernardino
385 N. Arrowhead Avenue, Third Floor
San Bernardino, Ca 92415-0182

Gentlemen:

Thank you for the opportunity to comment on the Draft EIR/EIS for the Rail-Cycle Bolo Station Landfill.

The Desert Protective Council is concerned about the proliferation of dumps and landfills throught the deserts of California. The numbers continue to increase.

Until the types of land fills/dumps and the total tons to be handled therein (i.e. hazardous, garbage, solid waste, tires and so forth) it is impractical to comment on each landfill independently.

The total acreage which BLM is planning to exchange, transfer or sell has not been documented or released, nor has taxpayer loss. ①

The issue of allowing the "contributing counties" to cease or decrease their recycling efforts has not been addressed. ②

The cost to taxpayers for the total costs for giving up public lands, to Caltrans and DoT for hauling and liability are not included in the EIR/EIS for the Rail-Cycle Bolo Station Landfill. ③

Please keep this organization on your mailing list at my home address.

Respectfully submitted,

Douglas Allen, President
1742 Meade Ave
San Diego, CA 92116

c: BLM

DOCUMENT 044
THE DESERT PROTECTIVE COUNCIL, INC. - DOUGLAS ALLEN
RESPONSE TO COMMENTS

Response 044-1

1. Section 3.2 of the Draft EIR/EIS described the proposed exchange of public for private lands required for implementation of the proposed action. A total of two and one-half sections (1,600 acres) of publicly owned land managed by BLM would be exchanged for three sections (1,920 acres) of land owned by ATSF and Rail•Cycle. The potential impacts of this exchange are addressed in Sections 4.14 and 5.14 of the Draft EIR/EIS. The costs associated with executing the exchange would be borne by Rail•Cycle. There would be no cost to the taxpayer for the exchange.

Response 044-2

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:

   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 044-3

1. See Response 044-1. The costs associated with the proposed land exchange and waste hauling (including liability) would be borne by Rail•Cycle. There would be no cost to the taxpayer either directly or indirectly.

Sierra Club
San Gorgonio Chapter

Serving Riverside and San Bernardino Counties
Tahquitz Group • Los Serranos Group
San Bernardino Mtns. Group • Mojave Group
568 N. Mountain View Ave., Suite 130
San Bernardino, CA 92401
(714) 381-5015

County of San Bernardino
385 N. Arrowhead Ave., Third Floor
San Bernardino, CA 92415-0182
Attn: Randy Scott

(please reply to both the letterhead address & PO Box 106, Barstow, CA 92312)

Dear Mr Scott; 8 Februrary 1993

Thank you for sending us a copy of the proposed Rail-Cycle Bolo Station landfill draft EIR/EIS (dEIR/EIS). We have many concerns about this proposed landfill. The Sierra Club recommends the **"NO ACTION ALTERNATIVE."** The Sierra Club analysis is that the following inadequacies exist in the draft document.

I. Introduction

We are particularly concerned that the following significant adverse environmental impacts are unavoidable even after mitigation: Ground water supply, Air quality, Visual resources, Land use, and Socioeconomics. We have never before seen a dEIR/EIS that had so many unavoidable, unmitigatable environmental problems.

GROUNDWATER. We are concerned about groundwater depletion by the proposed project, surface water contamination, ground water impairment, and leakage of various contaminants into the ground water.

AIR QUALITY. The project with its additional trains would increase air pollution in the Los Angeles Basin, San Bernardino Valley, Cajon Pass, the High Desert cities, and everywhere en route. Unless the proponent will employ electric trains, which cause no air pollution, the resulting PM_{10}, NO_x, ROG and O_3 emissions are unacceptable and unhealthful to some 10-15 million Southern Californians. ①

VISUAL RESOURCES. The impacts on the Visual Resources of this proposed landfill are unacceptable. It would permanently change the character of this remote beautiful region. We desert residents are very sensitive to the accusation that "the desert is a dump." The Sierra Club and many other groups are working hard towards beautifying the desert, not uglifying it. ②

LAND USE. The proposal in incompatible with the San Bernardino County General Plan. It represents a major change of rural limited use to an intensive land use that is not compatible with the classification of Resource Conservation. ③ The proposed action is not compatible with the Open Space Element of the San Bernardino County General Plan. ④

SOCIOECONOMICS. The remote area of Amboy and Bolo cannot sustain and nurture the additional workers and families that would live in the area. Old Highway 66 has been a freeway bypass area since I-40 was completed in 1973. The old highway 66 towns of Amboy and others have practically become ghost towns since 1973. Increased population would accelerate consumption of local land and water resources. The infrastructure for families, children and accompanying services just isn't there. And County taxpayers are in no mood to subsidize this project just so Rail-Cycle can get rich while dumping garbage on us. ⑤

II. INADEQUACIES OF THE DRAFT EIR/EIS

The Railcycle dEIR/EIS is generally uninformative and conclusory. That is, in many instances it provides only the results of a study without laying the factual foundation. As a result, the public and the decision makers must take the data presented "at face value," and cannot independently weigh the dEIR/EIS' conclusions.

In addition, this document fails to identify several other impacts of the project and therefore fails to propose mitigations for these significant impacts. Also, even when the dEIR/EIS does identify a significant unavoidable adverse impact, in many instances it fails to propose feasible measures to make a good faith effort to reduce the level of significance.

In several instances, noted below, the mitigations proposed are vague and intangible. All too often, the document tries to persuade, and not inform the reviewer, or to defer the proper analysis of impacts and appropriate tangible mitigations to the future.

What the DEIR/EIS does demonstrate is that the Railcycle project is one of enormous and precedent-setting proportions, both in its physical size (several square miles in area and some 800 feet high) and in its major unavoidable significant impacts. ⑥ Yet, other than that, the project description is inadequate, the impact analyses are superficial, the alternatives analysis flawed, and the vast majority of mitigations proposed for this major project are nothing but a commitment to comply with the minimum state and federal regulations.

The following are some of the inadequacies found in the Railcycle dEIR/EIS:

NEEDS ANALYSIS.

*In a project of this magnitude, with serious unmitigatible adverse environmental impacts, it is incumbent upon the dEIR/EIS to solidly establish an irrefutable need for the project. The dEIR/EIS utterly fails to do this. Its superficial needs analysis simply states, "expansion of existing landfills and siting of new landfills in southern California....may (emphasis added) not provide a long-term solution to waste disposal requirements of the region" (p 2-1). No foundational facts are given as to the existing and proposed expansions of more local landfills. Nor is the experience of success in recycling or the potential for reducing waste by 50% or more provided for the reviewer. ⑦

*The analysis simply goes on to compare the capacity of the three most likely regional landfills, 61,000 tons, to the current daily generation of four counties consisdered, 70,000 tons. This comparison is meaningless in view of the fact that state law mandates significant reduction of municipal waste by the year 2000. As required by AB 939, the projected waste for these counties in the years 2000 will be 35,000 tons, not 70,000 as suggested by the dEIR/EIS. Clearly, existing landfills and proposed expansions will take a good percentage of that. The Sierra Club feels there are better solutions to the waste crisis than regional landfills for the long term----according to the dEIR/EIS' own critieria for "long term regional landfilling capacity." But even according to the dEIR/EIS' own criteria, it is clear any one regional landfill would be adequate to accomodate the balance for one hundred years, and meet the criterion of providing long term regional landfilling capacity. It should be noted that the foregoing analysis assumes that recycling, etc. will reduce waste by no more than 50% over the next century, and this assumption is probably too conservative. ⑧

ALTERNATIVES ANALYSIS

*The dEIR/EIS' alternatives analysis is fundamentally flawed. The document's "operational critieria," or rationale for dismissing alternative regional landfill options in favor of the project, are skewed to justify the project. The dEIR/EIS arbitrarily uses these criteria to eliminate all but the Railcycle alternatives. Moreover, at least one major alternative regional landfill, the Mesquite proposal, is found on the map (p 3-69) and is discussed in the introduction, but is not addressed at all in the alternatives analysis. ⑨

*The "operational critieria" (by which the dEIR/EIS judges alternative sites) apparently assume that siting a landfill at Bolo Station or Cadiz will not impact threatened desert tortoises, simply because there are few on the actual footprint of the proposed landfill. This assumption flies in the face of scientific knowledge. Railcycle, Eagle Mountain and all other regional landfills proposed for the desert have the potential to impact tortoise outside of the footprint, because they could increase numbers of ravens which can fly great distances to prey on baby tortoises. ⑩

Moreover, all desert rail haul projects could result in direct take of tortoise on train tracks as a result of increased traffic, as well as indirect adverse impacts related to train emissions and so forth. The dEIR/EIS fails to address this issue. ⑩ CONT.

*Additionaly, the dEIR/EIS' operational critieria fail to consisder the tremendous visual blight created by the project, in comparison with other alternatives. Why was this not part of the criteria? ⑪

*Moreover, the alternatives analysis neglects to address the Mesquite regional landfill proposal (Imperial County), and downplays the viability of the Niland proposal, both without adequate foundation. The no action alternative is clearly the environmentally superior alternative and is not called out. The alternatives analysis fails to meet the intent of CEQA and NEPA to provide reviewers with a reasonable range of alternatives to the proposed project. ⑫

WILDLIFE/BIOLOGY.

*As outlined above, the dEIR/EIS gives little consideration to the offsite effects of this rail haul project on the "threatened" desert tortoise. In this regard, the alternatives analysis conflicts with the biological analysis. According to the former, alternative site B is Class I tortoise habitat, and lies less than 10 miles away from Bolo Station (pp 3-75 and 3-79). Yet the biological assessment only refers to the Fenner-Chemehuevi-Piute Valleys approximately 20-25 miles away. This contradictory data obfuscates the facts. ⑬

*The dEIR/EIS is also extremely superficial in its treatment of feasible means to control raven populations, should the suggested measures fail to do so. It simply states, "increases in raven density....may require additional mitigation measures, which Railcycle would develop and accomplish..." (pp 5.65 and 6). General, intangible statements of this sort defer analysis and clearly fail to serve as feasible mitigations. ⑭

*The dEIR/EIS also fails to addresss the project's impacts to 4800 acres onsite, or increased impacts to surrounding natural areas caused by employees of the project. How is this loss of impacts to habitat and open space proposed to be mitigated? The dEIR/EIS does not even attempt to quantify these impacts, much less indicate a mechanism to fully mitigate them. ⑮

*Project impacts to desert wildlife along the railroad line are not addressed. The proposal is to run trains primarily at night and early morning, the most active time for desert wildlife. The effects could be profound, and must be addressed. ⑯

*Likewise, no analysis of the additional train traffic's effect on tortoises living adjacent to the railroad line has been made. Increased stress, direct take, and potential deleterious effects of increased emissions on the health of the tortoise must all be addressed. ⑰

*In addition to the above, the biological assessment analyzes only the construction and operations phases. What about closure and post closure? The revegetation of the site is of very questionable feasibility calling for survival of desert vegetation with roots no deeper than one foot. What is the foundation for asserting such plants will survive on desert slopes? What happens to the integrity of the cover when deeper-rooted plants take hold? ⑱

*The vector eradication program alluded to on page S.8S "using a professional pest controller, if necessary" is nonspecific. What would it comprise? Is it feasible? What are the potential effects on surrounding wildlife? ⑲

*The issue of blowtrash and its effect on wildlife, particularly the threatened desert tortoise is not addressed. Litter policing suggested by the dEIR/EIS is nonspecific. What will be the exact policy and implementation? What about litter that blows well offsite? What will be the legal and financial responsibility of the proponent? ⑳

SOCIOECONOMIC/LIABILITY

*A project of this magnitude of Railcycle has grave economic implicatons. What if the project goes belly-up in 20 years? Why make funding for closure and post closure costs dependent on tipping fees? What if there are derailments and spills of garbage? What if stormwater invades the landfill cover and causes mass wasting or other conditions causing failure of the cover and tremendous remediation costs? What about contamination of the aquifer? ㉑

*The "corrective action" insurance policy suggested by the dEIR/EIS is completely inadequate to mitigate or protect the general public for the huge liabilities created by the project. For one thing, the sample policy explicitly excludes bodily injury, property damage, envrionmental impairment, and closure/post closure claims. For another, there is no sample declarations page showing the limits of coverage, which should be in the tens of millions of dollars to adequately protect the public. For another, this is a claims made policy; that is, the policy covers only claims made in the year insured, and if the premiums cease to be paid, the policy will no longer remain in force. There is no guarantee the premiums will be paid for the life of the project. What's more, it is our understanding that the rating of the proposed insurance carrier (by Bests, the industry standard) is "unrated." Apparently the policy holders' surplus is only $1.6 million. Further, the proposed insurer is apparently not admitted in the State of California, which means that the benefit of protection of the insurance department is not afforded. Please verify. ㉒

*What guarantees are there that necessary funds to remediate emergencies will be available to the County or other responsible agencies on a timely basis, without unnecessary red tape? It appears there are none. The dEIR/EIS does not even contain sufficient analysis of probable ㉓

emergencies arising from a long-lived project of this huge scale, much less the question of how to guarantee swift remediation of emergencies. Emergency response, or even timely investigation of problems, requires funding in substantial amounts if the County of San Bernardino (the public) is not to be left holding the bag. ㉓ CONT.

*The dEIR/EIS refers to tipping fees as a source of monies to ensure post closure monitoring and maintenance (p 3-63). What amounts would be necessary? How has this been calculated? What amounts can the traffic bear? Why shouldn't this mitigation be guaranteed up front, instead of relying on tipping fees which are dependent on the success of the project? The dEIR/EIS fails to even indicate the minimum amount of waste necessary to make the project economic, much less to generate tipping fees adequate to cover the enormous post closure risks of the project that the public should not have to assume. ㉔

PUBLIC HEALTH AND SAFETY

*One potential impact that is defined by the dEIR/EIS is the increase in traffic and proportionate increase in safety hazard index values of up to 32% along the rail line used. However, it is not sufficient for an dEIR/EIS to merely identify an impact and make no attempt to mitigate it, but this is again the case here. Moreover, the dEIR/EIS speaks of the impact in the text, but fails to call it out as a significant adverse impact of the project. ㉕

*The health risks analysis is found in the air quality analysis, and falls far short of adequacy. Paragraph 2, p S.7-10, especially the assertion that the modeling used "significantly overestimates the risk," is an attempt to persuade, not inform. This is typical of much of the dEIR/EIS. ㉖

*The toxic air contaminant health risk also gives no foundation for the data shown in table 5.7.7. What are the total emissions expected, what percent can reliably be captured? What percent will escape? What mitigations are offered to increase the safety factor, and so on. Where is this essential information? ㉗

*The assessment/mitigations regarding the potential for uncontrollable underground landfill fires are severely deficient. The dEIR/EIS underplays the potential for such fires, and offers only compliance with safety regulations and "reserve waste supply for firefighting" as mitigation. What good is water for an underground fire? The fact remains that a landfill of this magnitude in one, unseparated mass, sitting on sediment near an active fault, with great potential for subsidence and great surface exposure--is a recipe that has never been tested. The dEIR/EIS ignores this issue, and fails to indicate if there is any proven technology for controlling the major type of fire that the project may see, and what the air quality and health impacts would be of such an undergroud fire, smoldering uncontrollably for a long period of time. ㉘

*What about potential for contamination of the landfill with atomic waste? The dEIR/EIS admits that indeterminate amounts of hazardous waste will slip by inspection and contaminate the landfill, but no mention is made of atomic waste. In view of the the enormity of the project, and significant risks of subsidence, landfill fires, etc, the dEIR/EIS nees to addresss this issue. ㉙

GROUNDWATER/HYDROLOGY

*The proposed project has a life of 60 to 100 years, with a mandated 30 year post closure monitoring period, (which should actually be extended, given the magnitude of the project and its potential adverse consequences). The result of stormwater infiltrating the huge mountain of garbage could be disastrous, ranging from vastly increased leachate and landfill gas production to mass wasting-- that is, failure of the landfill's artificial slopes. Any of these, and other possible scenarios would result in enormous remediation problems. Yet the drainage system proposed to protect the integrity of this huge mass of garbage from infiltration by stormwater is only designed for the minimum storm event required by regulations for normal landfills, that is, the 100 years, 24 hour storm. The project's minimum life, including a minimum post-closure period , is longer than that. ㉚

*The characterization of the Bristol groundwater basin is woefully inadequate. The technical assumptions and conclusions presented in this analysis are poorly documented, and groundwater basin characterization reports are not provided. For instance, the dEIR/EIS' assessment of the quantity and quality of the Bristol Basin water is extremely vague. The dEIR/EIS calls its information "preliminary" and the text analysis is qualified by words such as "apparently" (p 4.4-18) which fail to inform the reviewer as to the true existing conditions. Further, the dEIR/EIS fails to give the status of the basin. An overdraft of the basin is predicted. What is the overdraft now? What is the percentage increase of the project? ㉛

*The beneficial uses of the Bristol Basin water are not sufficiently described. Apparently fresh, potable water occurs relatively near the surface. The dEIR/EIS does not give adequate information for the reviewer to determine the project's potential impacts on potable water. What minimum clearance will be guaranteed between the landfill and water? Only 5 feet? How does the vaguely-alluded-to layer of fresh water interface with the basin's source of potable water? What if contaminants enter this layer? What is the permeability of the layers under the site? What are percolation rates? ㉜

㉝ *What are projected effects on the area's drinking water or other beneficial uses, the liner and protection system fail? The dEIR/EIS only asserts "a corrective action program will be develped and implemented" for contamination in the event the landfill liner fails. This is completely vague and utterly fails to provide tangible mitigation required by law. The only other proposed mitigation proposed by the document is to reimburse commercial entitites, such as Leslie Salt, for increased purification costs or loss of their resource. This does not inspire confidence in the containment system. ㉝ CONT.

*One of the main functions of the final cover of a landfill is to protect against erosion. The discussion of the landfill's final cover is vague and ambiguous. The dEIR/EIS asserts that clay will be used, but suggests that a HDPE liner may be used instead. The document also suggests, see above, to revegetate this mountain of trash with plants that have roots only one foot deep. The dEIR/EIS makes no analysis of the ability of any of the above to withstand the summer sun and torrential storms that are to be expected in the desert. ㉞

AIR QUALITY

The air quality analysis is totally inadequate. The document begrudingly admits to air quality impacts, but tabulated results are presented with little, if any, foundation. The methodologies used and the assumptions upon which they were based are not provided or justified, and small variations in these components could drastically change the magnitude of estimated impacts. ㉟

*Basically, the air quality analysis raises more questions than it
answers. Where is the trash to come from, anywhere in Southern ㊱
California? The rest of California? Elsewhere? What is the maximum
hauling distance proposed? The average? Where is the foundation for the ㊲
hauling emissions given? What was the basis for the figures quoted for ㊳
health risks?

*Further, it is incumbent for the preparers of an EIR/EIS to propose
mitigations to avoid or reduce impacts, and virtually no effort has been
made with regard to air quality impacts. Why are not electric versions of ㊴
landfill construction and operation equipment suggested as mitigations?
Why are not alternative fuel engines suggested for the trains, if ㊵
electrification is not currently feasible? What about special low
emission requirements for diesel trucks used for the project? What is ㊶
required when gasoline, or other cleaner fuel-powered versions of ㊷
equipment are available?

*The no action alternative analysis for air quality is inadequate
because it fails to justify assumptions on which it was based. It assumes
a 200 mile round trip by trucks to landfills outside the LA air basin. What ㊸
is the basis for this assumption? What about expansion of landfilling
capacity within the basin? Why didn't the analysis include increased ㊹
recycling and waste reduction? What about the other regional landfill
proposals? Even at face value, the analysis is deficient, as it offers no ㊺
foundation for the emissions data cited for this alternative.

*Some of the mitigations suggested, such as ATSF's annual replacement program for their locomotives, are totally unquantified and ㊻

meaningless. Another example is "Investigate potential air emission (46) CONT.
reductions to offset increases...."(p S.7-21). A promise to "investigate" (47)
may be good public relations, but it doesn't qualify as tangible mitigation.

*The dEIR/EIS speaks of conversion from landfill gas flares to energy regeneration in five years, but the document is vague; is this a requirement, or is it qualified? Will there be adequate gas generation? What are the air quality benefits to the local area, as opposed to requiring more advanced flare technology? (48)

CULTURAL AND PALENTEOLOGICAL RESOURCES

*The dEIR/EIS' cultural and paleontological resource analysis is deficient. For example, a cursory survey revealed numerous potentially significant finds on the surface of the site, but no subsurface sampling was conducted. Deferring this esential step leaves an unacceptable gap of knowlege, because the project calls for major excavation of the the 4800 acre site. Instead, the mitigations suggest that a part-time expert will be adequate to monitor the huge earthmoving project contemplated, and that education of heavy equipment operators will fill the gap. Again, the dEIR/EIS is deficient in deferring analysis of impacts, and in proposing inadequate mitigation. (49)

*The cultural resources assessment is similarly flawed, in deferring analysis and proposing inadequate mitigation. (50)

GENERAL

*The subsidence predicted for the landfill mass is 10% by height and 6% by volume. This estimate does not include possible underground subsidence caused by drawing groundwater. Yet these numbers are very significant and have grave implications for the leachate and landfill gas removal pipes and the final cover, and their ability to function properly. A drop of 80' in height and an unquantified amount of shrinkage would wreak havoc with these systems. If these systems go, the potential for contamination of groundwater is vastly increased, as is the likelihood of release of toxic gases and/or underground fire. Yet the only "mitigation" offered for subsidence impacts is "a monitoring plan will be developed" (p 1-10). But just monitoring is not mitigating. Verification is needed of these subsidence estimates, and , more importantly, the subsidence issue needs to be fully addressed. When potential impacts to groundwater, public health and safety, etc. have been clearly identified, real mitigations must be proposed. (51)

MOJAVE NATIONAL PARK/LAND USE

*The air quality assessment gives a conclusionary, unsupported opinion that the Class I area of Joshua Tree National Monument will not be (52)

adversely impacted. However, it totally neglects the soon-to-be Mojave National Park in its analysis, in spite of the fact that this area is much closer. In fact, to read the dEIR/EIS one would not even be aware that the Mojave National Park proposal even existed. (52) CONT.

PROJECT DESCRIPTION

*The dEIR/EIS project description omits information that is essential to an adequate evaluation of project-related and cumulative impacts. As indicated above, the dEIR/EIS fails to adequately address source reduction and recycling. Is the project mandated to receive only separated waste from appropriate facitilites? Or will the project accept unseparated waste? If so, this project will have the negative impact of undermining positive recycling/source reduction efforts, and this negative impact has not been addressed in the dEIR/EIS. (53)

*What is the absolute limit, in terms of distance, that waste will (54)
be hauled to the proposed landfill? Is 100 years the maximum allowable (55)
life of the project? If absolute limits are not to be imposed, then project
impacts to air quality, etc. need to reflect this fact.

III. CONCLUSION

For the foregoing reasons, the Sierra Club urges the responsible agencies to require the preparation of a revised (supplemental) draft EIR/EIS in order to provide adequate information and analysis of the project's impacts. This SEIR/EIS should be based on detailed documentation and references so that the reviewer can comprehensively assess the document's conclusions. In addition, the document should address impacts now (instead of deferring analysis of impacts) and make a good faith effort to propose tangible mitigations for all impacts of the project.

CORPORATE HISTORY

We are very concerned about the bad reputation Waste Management, Inc. has. In March 1992 the San Diego County District Attorney published a 58 page report entitled, "Final Report, Waste Management, Inc". This report concludes: "Waste Management Inc's methods of doing business and history of civil and criminal violations have established a predictable pattern which has been fairly consistent over a significant number of years. The history of the company presents a combination of environmental and anti-trust violations and public corruption cases which must be viewed with considerable concern....." We do not want companies with this kind of reputation polluting San Bernardino County. The environmental pollution is unacceptable and the legal pollution is unacceptable. (56)

The Sierra Club strongly supports AB 939, the California Integrated Waste Mangement Act of 1989. A major purpose of this law is to encourage waste minimization. There is nothing in this draft document that leads one to believe that Rail-Cycle is interested in waste minimization. Rather it seems that the motto of this proposal is "more trash = more profits." (57)

Until such time as the proponents can alleviate these stated concerns, we must continue to support the "**NO ACTION ALTERNATIVE.**"

Please keep us informed of the process.

Sincerely,

Joan Taylor
Joan Taylor
Conservation Chair

Peter Burk
Peter Burk
Solid Waste Co-Chair

DOCUMENT 045
SIERRA CLUB - SAN GORGONIO CHAPTER
RESPONSE TO COMMENTS

Response 045-1

1. Subsequent to circulation of the Draft EIR/EIS, additional analysis regarding potential air quality impacts were completed for the proposed action. Sections 4.4 and 5.4 of the Supplement described refinement and reevaluation of the impacts and mitigation. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMDs Air Quality Attainment Plan related to emission reductions for ozone precursors.

2. The estimate of combined NO_X and ROG project emissions at full development in the year 2010 is 1.7 tons/day, representing an increase in the current planning inventory baseline of 0.6 percent. To the extent that these emissions are not offset or mitigated in attainment plans adopted by the MDAQMD, these emissions could delay attainment of ozone standards.

3. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

4. The Supplement also included information regarding rail electrification (Section 5.4.3.2). Although this analysis concluded that rail electrification solely to mitigate Rail•Cycle's air quality impacts was not economically feasible, region-wide efforts are underway to implement measures to significantly reduce locomotive emissions.

5. A recent study was conducted under contract to CARB to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:

   - Retarding injection timing and other engine modifications.
   - Selective catalytic reduction (SCR).
   - Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
   - LNG combined with SCR.
   - Electrification.

   Based on the proposed regulatory framework, allowable locomotive emissions per net ton mile transported would be reduced by 80 percent between 1996 an 2003. Santa Fe Railroad is actively participating in the efforts to develop strategies to reduce locomotive emissions

Response 045-2

1. The proposed project would alter the visual character of the site; the selection of the proposed site reflects in part a recognition of the existing development in the project area including:

   - Mineral production (salts) on and surrounding the Bristol Dry Lake (i.e., Cargill and National Chloride).
   - Modest development at Amboy and Chambless.
   - Transportation corridors (i.e., rail, road and pipelines).
   - Intensive agricultural operations at Cadiz (i.e., CLC).

2. It is acknowledge in Section 5.9 of the Draft EIR/EIS that the impact to local visual impacts are significant and unavoidable. However, the selection of the Bolo Station site avoids impacts to the more regionally significant visual resources of the East Mojave National Scenic area, the WSAs proposed for inclusion in the pending California Desert Protection Act, and the proposed Mojave Desert National Park.

Response 045-3

1. Section 5.14.1.2 of the Draft EIR/EIS incorrectly indicated that the proposed project would require

reclassification of the land use designation of the proposed site from Resource Conservation to a land use that would allow more intensive use of the site. If the County Board of Supervisors approves the proposed project, the County General Plan would be amended to revise the Infrastructure/Improvement Level Map and accompanying text to designate the site as the Bolo Station Landfill. The land use designation of Resource Conservation would be applied to the former public (i.e., BLM) land sections. The remaining sections of land at the proposed site are currently designated as Resource Conservation and would remain as such, if the proposed action is approved.

2. The proposed General Plan amendment is the mechanism for revising the Infrastructure/ Improvement Level Map and text to designate the site as a landfill. The General Plan Amendment would be considered by the County Board of Supervisors during its consideration of the proposed project.

3. As discussed in Section 3.7 of the Draft EIR/EIS, the site selection process for the proposed landfill included a criterion that the site should be compatible with existing and future land uses. This criterion included consideration of regionally significant existing and future open space resources such as the East Mojave National Scenic Area, WSAs designated in the CDCA, the WSAs proposed for inclusion in the pending California Desert Protection Act, and the proposed Mojave Desert National Park included in the pending California Desert Protection Act. As discussed in Section 5.14 of the Draft EIR/EIS, the proposed project would not impact regionally significant existing or future open space resources.

4. The selection of the proposed site reflects in part a recognition of the existing development in the project area including:

   - Mineral production (salts) on and surrounding the Bristol Dry Lake (i.e., Cargill and National Chloride).
   - Modest development at Amboy and Chambless.
   - Transportation corridors (i.e., rail, road and pipelines).
   - Intensive agricultural operations at Cadiz (i.e., CLC).

   As noted in Section 5.14 of the Draft EIR/EIS, based on the avoidance of regionally significant existing and future open space resources, and the nature and extent of the existing development in the project area, while the proposed project is considered to have a significant impact on open space in the local vicinity of the site, the proposed project is not considered to have a significant impact on regional open space.

Response 045-4

1. Section 5.9 of Draft EIR/EIS analyzed the proposed project's effects on the visual resources in the Bristol and upper Cadiz basins. The analysis concludes that the project would result in unavoidable significant impacts to scenic quality due to the introduction of an intensive, industrial-type land use into a relatively natural setting. The natural land use setting of the Bristol and Cadiz basins, however, has been modified by past and present mining activity, as well as by the introduction of a large scale agricultural operation (CLC) that created its own level of unnatural appearance to the region.

2. The creation of a large, man-made landform, that would appear as an artificial hill on about 2,000 acres south of the ATSF railroad line even with the implementation of mitigation measures, creates a significant unavoidable impact on existing local visual resources. These changes to the physical environment were evaluated and disclosed as required by CEQA and NEPA in Section 5.9 of the Draft EIR/EIS. However, the Draft EIR/EIS in the Impact Summary Table (Table 1.1) also identified that these impacts constitute an inconsistency with the County General Plan. However, this conclusion was not reached in Section 5.9 of the Draft EIR/EIS. General Plan consistency is a policy interpretation that is the prerogative of the County Board of Supervisors as the policy-making body of the County. While it is appropriate for the EIR/EIS to consider General Plan policies as they relate to the physical environmental impacts of the proposed project, the ultimate determination of consistency of the project with the County General Plan rests with the County Board of Supervisors and will be considered as part of its action on the land use application for the proposed landfill.

Response 045-5

1. The Draft EIR/EIS recognized the limited resources of the remote Amboy - Bolo Station area. Section 5.15 of the Draft EIR/EIS states the following:

   > "Due to the relative lack of housing and infrastructure in the project area communities, project-related population is

> expected to seek housing elsewhere. ... it is assumed that the largest regional urban areas of Morongo Basin and Barstow would be the choice of residence for the majority of project construction and operations personnel."

2. The commenter's concern about funding is acknowledged. The proposed action would be funded entirely by Rail•Cycle. A portion of the revenues would be paid to the County to offset any costs and as a source of revenue for the County. Therefore, County taxpayers would in no way be required to subsidize the proposed action.

Response 045-6

1. While this comment is correct in stating that the proposed landfill would cover several square miles, the final elevation of the proposed land is a maximum of 450 feet above the surrounding terrain, rather than the 800 feet suggested by this comment.

Response 045-7

1. Based on comments on the Draft EIR/EIS, Chapter 2.0 of the Supplement provided an expanded discussion of the purpose and need for the proposed action. The discussion focused on the regulatory requirements for solid waste management and the regional need for additional landfill capacity.

2. The commenter's concern regarding the success of reducing waste by 50 percent is acknowledged. However, this is a regulatory requirement (AB 939), not a requirement of the proposed action.

Response 045-8

1. As shown in Table 2.3 of the Supplement, metropolitan Los Angeles County may experience an approximate 10,000 tons per day shortfall in solid waste disposal capacity by 1998. Without development of substantial additional landfill capacity, even with implementation of AB 939's mandated source reduction and recycling requirements, this shortfall is projected to increase to approximately 16,000 tons per day by 2005. The proposed action would accommodate up to 21,000 tons per day of solid waste.

2. As shown in Table 2.4 of the Supplement, with implementation of the proposed action, metropolitan Los Angeles County's short-term solid waste disposal crisis would be averted. While operation of the proposed landfill would avert the short-term solid waste disposal crisis in Los Angeles County, the proposed action would not be able to fully accommodate Los Angeles County's long-term solid waste disposal needs. Table 2.4 showed that a projected 14,000 ton per day shortfall would develop by 2014. Combined with potential shortfall from other counties, including Kern, San Diego, San Bernardino, Orange and Riverside, which are estimated to have only 6, 7, 8, 17, and 18 years of landfill capacity remaining, respectively, this shortfall in Los Angeles County indicates that the proposed action would play an important role in providing a solution to a portion of southern California's long-term disposal needs.

Response 045-9

1. A clarified discussion of project alternatives was provided in Chapter 3.0 of the Supplement. This discussion clarifies how project alternatives were developed, evaluated, and rejected or selected for further analysis, as well as the alternative site selection process. The operational criteria used for initial site selection are those determined by Rail•Cycle and concurred on by the County and BLM to be fundamental to successful operation of an environmentally safe rail-haul landfill. These criteria are applied objectively by the EIR/EIS to identify potential sites which have the potential to reduce or eliminate significant environmental effects of the proposed action.

2. The proposed Mesquite Regional Landfill was discussed in Section 3.7.2.1 of the Draft EIR/EIS and Section 2.4 of the Supplement. This potential alternative was rejected from detailed consideration because the site is actively being proposed for a rail-haul landfill by another applicant and therefore could not reasonably be expected to be available to Rail•Cycle for implementation of its rail-haul landfill concept.

Response 045-10

1. Section 5.6 of the Draft EIR/EIS outlined mitigation measures designed to minimize potential effects to the desert tortoise by ravens that may be attracted to the landfill. Implementation of these measures, along with additional or revised mitigation measures included in the EIR/EIS, which include a regional raven baseline study and ongoing monitoring program, would assure that ravens do not have a significant effect on the tortoises.

2. Project-related train traffic would occur along existing main rail lines. As the additional trains associated with the proposed action would occur along an existing ATSF line, it is expected that project-related train traffic would not have a significant effect on the tortoise or other wildlife species (Section 5.6 of the Draft EIR/EIS).

3. Section 5.7 of the Draft EIR/EIS evaluated the potential for the project-related emissions to cause harm to humans and vegetation. The analysis concluded that the risk to human health and vegetation is not significant. It is expected that tortoises would not be a more sensitive receptor for potential emissions than humans or vegetation; thus any potential risk to tortoises is anticipated to be less than significant.

4. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

Response 045-11

1. Section 5.9.7 of the Draft EIR/EIS acknowledged a significant unavoidable impact on visual resources that would result from implementation of the proposed action. This significant unavoidable visual impact would occur for any of the project alternatives, with the exception of the No Action Alternative.

Response 045-12

1. CEQA and NEPA provides for the discussion of a "reasonable range" of alternatives. The discussion need not be exhaustive, but rather is intended to provide adequate information for a comparative analysis of potential impacts. In providing a No Action, Reduced Action and alternative site analysis of alternatives, the EIR/EIS meets the intent of CEQA and NEPA to provide a reasonable range of alternatives.

2. The proposed Mesquite Regional Landfill and Niland site were discussed in the Section 3.7.2.1 of the Draft EIR/EIS and in Section 2.4 of the Supplement. The potential alternatives were rejected from detailed consideration because each site is actively being proposed for a rail-haul landfill by another applicant and therefore could not reasonably be expected to be available to Rail•Cycle.

3. Section 1.7 of the Draft EIR/EIS identified the No Action Alternative as the environmentally superior alternative. Among the remaining alternatives, the proposed action would be the environmentally preferable alternative.

Response 045-13

1. As indicated in the analysis of potential impacts to vegetation and wildlife in Sections 5.5 and 5.6 of the Draft EIR/EIS, the nature of the proposed action is such that the majority of impacts would occur within the boundaries of the project site. An exception is the potential for ravens to be attracted to the site, thereby creating a potential hazard to desert tortoise populations that are north and east of the proposed site.

2. The commenter is correct and the Draft EIR/EIS acknowledges (see Section 3.7.2.3) that there is Category 1 tortoise habitat closer to the proposed site than the proposed tortoise Desert Management Area (DMA) located in the Fenner-Chemehuevi-Piute Valleys located approximately 20 to 25 miles northeast of the site. The Category 1 habitat referred to by the comment is approximately ten miles east of the Bolo Station site and includes a portion of one of the areas considered as an alternative to the proposed site (designated as Alternative B in Section 3.7.2.3 and Figure 3.19 of the Draft EIR/EIS). It was due to being located in a Category 1 habitat that this alternative site was eliminated from further consideration in the Draft EIR/EIS.

3. The commenter misinterpreted the discussion in Section 5.6.1 of the Draft EIR/EIS regarding the Category 1 habitat at the Fenner-Chemehuevi-Piute Valleys DMA and its location in relationship to the proposed site. The Draft EIR/EIS did not characterize the Fenner-Chemehuevi-Piute Valleys DMA as the closest Category 1 habitat to the proposed site. Rather this area, along with other proposed tortoise DMAs in the project region, were identified to highlight that there is a concern that ravens could be attracted to the proposed landfill and that there are several areas (DMAs) that are being managed as part of the USFWS's tortoise recovery plan within 20 to 35 miles of the proposed site.

4. The commenter is incorrect in stating that only the Fenner-Chemehuevi-Piute Valleys DMA is referenced in the Draft EIR/EIS. As stated in Section 5.6.1 of the Draft EIR/EIS, other tortoise DMAs are located in the general area of the proposed site including DMAs at Joshua Tree and Ivanpah.

Response 045-14

1. The control of ravens and other bird species at the proposed landfill was discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations would be employed (i.e., compaction of waste at the working face, periodic application of cover material during the day, maintaining a small working face, and implementing an active litter control program) that are expected to be effective in limiting the attractiveness of the site to ravens and other birds. In the event ravens or other bird species are attracted to the site, various measures would be implemented on an as-needed basis to prevent bird populations from becoming established at the landfill.

2. Section 5.6.5 of the Draft EIR/EIS included specific mitigation measures that would be implemented if ravens or other birds are found to be attracted to the site. These measures include, but are not limited to, the use of an overhead nylon line grid system (bird wires), distress tapes, propane cannons, and racket bombs. The effectiveness of these measures would be monitored and, if these measures are found not to be completely effective, additional measures would be developed by Rail•Cycle in consultation with BLM, USFWS, and CDFG.

3. Rail•Cycle, in consultation with BLM and USFWS, initiated a baseline raven study that included an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys documented current raven (as well as other bird species) populations and usage patterns in the study area. Baseline data gathered as a result of this study would be compared to data collected during the operation of the proposed landfill. If comparison of data finds that ravens are being attracted to the site, or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented in consultation with BLM, USFWS, and CDFG.

4. See Response 045-10 regarding the USFWS Biological Opinion regarding the desert tortoise.

Response 045-15

1. As stated in the Draft EIR/EIS, approximately 2,700 acres of the 4,800-acre Bolo Station site would be disturbed for the proposed landfill and of this area, approximately 300 acres could be permanently lost. The rest would be sequentially disturbed and then revegetated over the anticipated 60- to 100-year life of the landfill.

2. Criteria to determine what impacts, if any, to vegetation and wildlife would be significant were set forth in Sections 5.5 and 5.6 of the Draft EIR/EIS. Based on the analysis and mitigation measures proposed, no significant impacts are expected from the proposed action.

Response 045-16

1. The impacts related to train-traffic to haul solid waste residue to the landfill would be incremental in nature. The proposed rail-haul route is an active line that is operational 24 hours a day, 365 days a year. The line has been in operation for about 100 years. Therefore, the existing environment, including diversity and density of plant and animal species, reflects adaptation to ongoing rail transport activities. Additional impacts resulting from an increase in train traffic would be incremental and consistent with normal fluctuations in rail transport over the past 100 years.

Response 045-17

1. As discussed in Section 5.6.1 of the Draft EIR/EIS, tortoises do not appear to be adversely affected by noise associated with main-line rail activities (BLM and Riverside, 1991). Further, tortoises have been found to burrow in the roadbed of active rail lines with no apparent negative effect to the tortoise (Lawhead and Scheid, 1991). Therefore, as discussed in Response 045-16, the additional train traffic from the proposed action would result in incremental but not significant effects to tortoises that may be resident in the area.

Response 045-18

1. As described in Section 3.3.2.1 of the Draft EIS/EIR, the landfill would be developed incrementally, one cell at a time. Following completion of each cell, the surface of the cell will be "closed." That is, it would receive an engineered, multi-layer covering of soil, clay, and/or synthetic materials and then revegetated.

2. In response to other comments on the Draft EIR/EIS, the topsoil layer over the final cover of the landfill was increased to 2 to 3 feet, from 1 foot described in the Draft EIR/EIS. This change was made after consultation with NPS, Joshua Tree National Monument and was described in Section 3.2.7 of the Supplement.

3. A mitigation measure has been included in this Final EIR/EIS (Table S.2) that requires Rail•Cycle to develop a detailed revegetation plan for the proposed landfill in consultation with NPS, Joshua Tree National Monument. This mitigation measure includes a requirement that Rail•Cycle establish a nursery at Bolo Station for germination and growth of native shrubs. These nursery-grown native plants would be transplanted to the closed cell and planted in an island configuration, similar to the surrounding vegetated communities. Plants would be artificially watered for one to two months. If drought conditions exist, the irrigation would continue for several months, thereby enabling the shrubs' root systems to become established. Overhead irrigation may be temporarily used on the landfill sideslopes to assist in the initial establishment of the revegetation; however, only a drip irrigation system would be used on the top slopes of the landfill. If long-term irrigation is required on the sideslopes a drip system shall be installed.

Response 045-19

1. The vector eradication program discussed in Section 5.8.1.1.5 of the Draft EIR/EIS is as specific as possible, at this time. For example, it is not known that such a program would be required, as vector problems do not necessarily occur at modern landfills that are designed and implemented in accordance with current state and federal regulations. Further, a program to control potential vectors cannot be designed in the absence of the problematic species.

2. In the event that a vector eradication program should become necessary, it would be designed, tested, implemented, and monitored in accordance with requirements of the SBCDEHS, as the LEA, and the CIWMB. These measures, would, if required, provide appropriate controls to protect the surrounding environment from being affected by either the potential vectors or the methods utilized for controlling such pests.

Response 045-20

1. Litter control measures for the proposed Bolo Station Landfill were discussed in Sections 3.3.2.1.3 and 5.8.1.1.5 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected.

2. An important point to note is that by primarily accepting post-recycled waste or waste that has been processed through a MRF, as will be required as a condition of approval by the County, a significant portion of the primary source of litter at most landfills (i.e., paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the litter control measures that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

3. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program including reduction of the size of the working face or curtailment of waste disposal operations, during periods of extremely high wind velocity. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

Response 045-21

1. Tipping fees have been deemed by state and federal regulations to be the appropriate source of funding to provide for closure of landfills and for the 30 years of postclosure monitoring and maintenance. In accordance with CCR Title 14, Division 7, State Assembly Bill 2448 (Eastin) and Subtitle D, Rail•Cycle would establish an appropriate funding mechanism for setting aside closure and postclosure funds. The selected funding mechanism requires the approval by the LEA and CIWMB.

2. In addition, Rail•Cycle would establish the appropriate funding mechanisms to provide financial assurance for corrective actions in accordance with CCR Title 23, Chapter 15, Article 5 and Subtitle D for potential ground water issues. This would occur by implementation of an appropriate financial mechanism, such as a corrective action insurance policy, bond or other measure mutually acceptable to the RWQCB. An example of such a policy that is in place at another landfill, in a different state was provided as an example in Appendix K, of the Draft EIR/EIS.

3. Funding mechanisms utilized for the proposed action would be subject to review and approval by

the LEA, CIWMB, and RWQCB. These mechanisms would provide assurance that adequate funding is available for compliance with the requirements of the SWFP, WDRs, CUP, and the closure/postclosure plans for the landfill.

Response 045-22

1. As noted in Response 045-21 and in Section 3.6.2 of the Draft EIR/EIS, the insurance policy shown in Appendix K is only an example. The financial assurance mechanisms selected for the proposed action would have to be acceptable to the LEA, CIWMB, and RWQCB.

Response 045-23

1. As noted in Responses 045-21 and 045-22, appropriate financial assurance mechanisms would be in place for the proposed action to assure that conditions are met and the public is protected. In addition, the allocation of funds received from tipping fees and taxes would be determined through negotiations between Rail•Cycle and the County. Other areas of responsibility, addressed in the EIR/EIS, would be conditioned by the appropriate permitting agencies.

Response 045-24

1. As discussed in Response 045-21, tipping fees have been deemed by state and federal regulations to be the appropriate means for landfill owners/operators to collect and set aside funds for closure and postclosure monitoring and maintenance. CCR Title 14, Division 7 includes a formula that requires landfill owners/operators to collect specific portions of the funds required for closure/postclosure on an annual basis. This formula assures that should the landfill cease its operations, sufficient funds have been collected and set aside on an annual basis to cover the cost of closure and postclosure for that portion of the landfill that had received waste.

2. CCR Title 14, Division 7 requires that preliminary closure and postclosure monitoring and maintenance plans be submitted for a landfill as part of its application for a SWFP. Included in the preliminary plans are cost estimates for closure and postclosure. It is these cost estimates that form the basis for determining what portion of the tipping fee is to be set aside for funding of closure and postclosure. Rail•Cycle would prepare the preliminary closure and postclosure plans that would establish the basis for closure and postclosure costs as part of the permitting process for the proposed landfill.

Response 045-25

1. As noted in Section 4.12 of the Draft EIR/EIS, the hazard index is a factor used by the PUC in conjunction with the U.S. Department of Transportation, and Federal Railroad Administration to indicate potential hazards at railroad grade crossings. The hazard index is a relative scale and cannot be used to directly determine the significance of traffic impacts. Vehicle delay time is a variable which can be used to directly evaluate traffic impacts at a given rail crossing. Section 5.4 of the Supplement presented a refined evaluation of vehicle delay time impacts at rail grade crossings for each of the potential MRF locations and the proposed Bolo Station Landfill.

Response 045-26

1. The health risk analysis was based on the report, *Air Quality Impact Analysis (AQIA) Bolo Station Facility, San Bernardino* (Jacobs, 1992). This report was identified in the Draft EIR/EIS as being available for review at BLM and County offices.

Response 045-27

1. See Response 045-26.

Response 045-28

1. The issue regarding the prevention of subsurface fires at the proposed landfill was discussed in Section 5.8.1.1.2 of the Draft EIR/EIS. As discussed in this section, the prevention of subsurface fires is one of the primary goals of CCR Title 14. The application of daily and intermediate cover materials, and proper operation of the landfill for collection system are considered the necessary measures to prevent subsurface fires.

2. As the proposed landfill would be designed and operated in compliance with applicable regulations, no additional mitigation measures for the prevention of subsurface fires are required for the proposed action.

Response 045-29

1. The hazard and/or special waste load checking procedures that would be implemented at the MRFs and proposed landfill would include specific procedures for inspecting the incoming waste stream for radioactive waste. These procedures also include the specific requirements for notification of appropriate agencies, handling, temporary storage, and disposal of such waste.

Response 045-30

1. Supplemental information regarding surface drainage and proposed improvements was included in Chapter 3.0 of the Supplement. As noted in this comment, stormwater control features would be designed, constructed, and maintained to accommodate a 100-year, 24-hour storm event.

Response 045-31

1. Subsequent to distribution of the Draft EIR/EIS, additional analysis regarding ground water was completed for the proposed action and included in Sections 4.2 and 5.2 of the Supplement. This subsequent analysis concluded that the proposed action would not adversely affect other ground water users in the area (i.e., Cargill, National Chloride, or CLC). Cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin. In the event that Bristol Basin is in overdraft, it would be considered a significant unavoidable adverse impact.

Response 045-32

1. Chapter 4.0 of the Supplement characterized the proposed site in relation to the State Water Resources Control Boards "Sources of Drinking Water Policy." Figure 4.2.2 was included in the Supplement to graphically depict the delineation between fresh water and water with elevated TDS (3,000 mg/L) based on this policy. This figure has been updated and is included in Chapter 1.0 of this Final EIR/EIS.

Response 045-33

1. Based on a study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However, the authors clearly make a distinction between liners and liner systems. They state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that: "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions."

2. As detailed in Chapter 3.0 of the Supplement, the proposed action includes a double-composite liner system and UZM system to provide 100 percent monitoring coverage under the liner. This monitoring system would provide sufficient time to implement corrective action in the unlikely possibility of a release. The measures included in the EIR/EIS are considered sufficient to mitigate potential ground water quality impacts from the proposed action.

Response 045-34

1. Section 3.2.7 and Figure 3.4 of the Supplement included additional information regarding the refined final cover system for the proposed action. Rail•Cycle is proposing the use of a 40-mil thick HDPE or equivalent flexible membrane liner in place of 1.5 feet of clay in the final cover. Use of a flexible membrane in the final cover is a permitting issue that will involve the RWQCB, LEA, and CIWMB. As the permitting process is not yet complete, the use of clay as part of the final cover represents the standard regulatory method.

2. See Response 045-18 for information regarding revegetation of the landfill at closure.

Response 045-35

1. As stated in Response 045-1, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement included refinement and reevaluation of the impacts and mitigation. MDAQMD has reviewed and submitted comments on the EIR/EIS, and have concurred with the primary findings that the proposed action would have a significant impact on air quality within the SEDAB after mitigation.

2. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response 045-36

1. Detailed information regarding the assumptions and factors used in compilation of the air quality analysis was included in *Air Quality Impact Analysis (AQIA) Bolo Station Facility, San Bernardino* (Jacobs, 1992). This report was

referenced and available for review at BLM and County offices, as stated in the Draft EIR/EIS cover sheet.

Response 045-37

1. See Response 045-36.

Response 045-38

1. See Response 045-36.

Response 045-39

1. See Response 045-1. Also see Section 5.4 of the Supplement for additional mitigation measures. A full list of the air quality mitigation measures included in this EIR/EIS is provided in Table S.2 of this Final EIR/EIS.

Response 045-40

1. See Response 045-1.

Response 045-41

1. See Response 045-39.

Response 045-42

1. See Response 045-39.

Response 045-43

1. Subsequent to the circulation of the Draft EIR/EIS, additional air quality analysis was completed. Sections 4.4 and 5.4 of the Supplement specifically included refined analysis regarding the air quality impacts of the No Action Alternative. It was concluded that emissions would decrease as a result of the 3,000 tons per day scenario (1994) resulting in a benefit to the air quality in SEDAB. Under the 21,000 tons per day scenario (1998), emissions of criteria pollutants in SEDAB would increase and is considered a significant impact.

Response 045-44

1. See Response 045-43.

Response 045-45

1. See Response 045-43.

Response 045-46

1. See Response 045-35.

Response 045-47

1. See Response 045-35.

Response 045-48

1. Section 3.2.4.4 of the Supplement provided additional information regarding the landfill gas recovery facility proposed for the landfill.

Response 045-49

1. Sections 4.11 and 5.11 of the Draft EIR/EIS detailed the paleontological research methods, paleontological resource findings, and proposed mitigation measures. The paleontological research methods and mitigation measures were developed in consultation with BLM. Paleontological research for the proposed action comprised a background archival records search, review of existing literature, and pedestrian survey of the proposed landfill site. Subsurface exploration was not conducted as part of the research program, nor was it required by BLM or the County.

2. The level of effort for the paleontological research and mitigation measures satisfactorily address agency concerns for the resource values. The 2,100 acre landfill site would be developed over a 60- to 100-year life span, and the monitoring mitigation measure can be expected to facilitate observation and recovery of significant fossil remains. The paleontological monitor would be empowered to direct landfill excavation away from the locations of paleontological resources until their significance is determined and, if determined to be significant in that location would discontinue project activities until in-field recovery is completed.

Response 045-50

1. Sections 4.10 and 5.10 of the Draft EIR/EIS details the cultural resource research methods, resource findings, and proposed mitigation measures. Cultural resource research for the proposed action comprised a background archival records search, review of existing literature, pedestrian survey of the proposed landfill site, and subsurface testing and data collection. The scope of the research meets federal and state standards for cultural resource management, and specifically satisfies the requirements of 36 CFR Part 800, the regulations implementing the National Historic Preservation Act. The cultural resource research methods and proposed mitigation measures were developed in consultation with BLM.

2. As stated in Section 1.1 of the Supplement, the Section 106 process for the proposed action has been completed. As explained in Section 2.6.6 of the Draft EIR/EIS, completion of the Section 106 process satisfies federal concerns for significant cultural resources in the project area and state concerns for the resources. Only significant resources, that is, those that meet the National Register of Historic Places (NRHP) criteria, need be considered in terms of long-term management or mitigation. Properties evaluated as not eligible for NRHP listing do not require further consideration or management.

Response 045-51

1. Revised information regarding potential settlement at the proposed site was provided in Sections 4.1 and 5.1 of the Supplement. Based on refined analysis conducted subsequent to the distribution of the Draft EIR/EIS, the soils underlying the site may be classified as "over-consolidated" instead of "normal to slightly over-consolidated" as determined by the earlier study (Jacobs, 1993b).

2. Based on the updated new soils characterization, maximum potential settlement at the site, including the effects of landfilling and ground water pumping, is estimated to be approximately 4.3 feet. This compares to the previously predicted maximum of up to 14 feet. As discussed in Section 5.1 of the Supplement, the landfill design is based conservatively on the maximum of 15.6 feet of settlement which is a refined estimate based on "normal to slightly over-consolidated" soils.

3. As described in Sections 4.1 and 5.1 of the Supplement, the design base grades for the landfill have been designed to account for the maximum settlement (due to both ground water pumping and landfilling), the 9-foot capillary zone, and the maximum potential rise in the water table (due both to a 100-year, 24-hour storm and due to the cessation of Cargill's pumping). The design will allow for the "worst case" cumulative effect of all these factors.

Response 045-52

1. The proposed action's potential for air quality impacts to the Joshua Tree National Monument was analyzed in detail in the Draft EIR/EIS (Section 5.7.1.2.1). As shown in Table 5.7.6 of the Draft EIR/EIS, air quality impacts are within the allowable Class I increments at the Joshua Tree Monument. The proposed action is not located within areas being considered for special designation under the proposed California Desert Protection Act. The closest areas to the proposed site being proposed for protection are the Marble Mountains Wilderness Area (four miles to the north) and Sheephole/Cadiz Wilderness Area (four miles to the south). The closest boundary of the proposed Mojave National Park is located approximately 16 miles to the north of the project. The referenced wilderness areas, as well as other special management areas in the CDCA Plan in the general area of the proposed action, were shown in Figures 4.14.1, 4.14.2, and 4.14.3 and discussed in Sections 4.14.1.2.1 and 5.14.1.1.3 of the Draft EIR/EIS.

2. Potential impacts at the Joshua Tree National Monument were evaluated according to federal criteria for the Prevention of Significant Deterioration at a Class I area. To date, the proposed Mojave National Park has not been designated a PSD Class I area.

Response 045-53

1. Waste transported to Bolo Station would consist of post-recycled residual waste reflecting the AB 939 diversion programs implemented by the cities and counties from which the waste originates. As compliance with the requirements of AB 939 rests solely with cities and counties, it is anticipated that the cities and counties that may use Bolo Station would be in compliance with AB 939 with or without the assistance of the network of MRFs that may be part of the Rail•Cycle system.

2. Private projects such as Rail•Cycle can assist cities and counties in meeting AB 939 through contracts that provide specific services or components within the jurisdictions implementation program. For example, a city contracting with a Rail•Cycle MRF for processing and disposal of waste may negotiate a certain level of recovery for specific waste stream components. Such a contract may make Rail•Cycle responsible for a portion of the city's AB 939 diversion requirement and allow the city to demonstrate the 15-year disposal capacity requirement of AB 939. However, such a contractual arrangement does not relieve the city from its ultimate responsibility for compliance with AB 939.

3. As an owner/operator of a private landfill, Rail•Cycle has no control over the AB 939 compliance of a city or county that disposes of its waste at Bolo Station. While it is reasonable to expect that the MRFs through which the waste is processed would assist cities and counties in

complying with AB 939, there are many variables beyond the control of the MRF or landfill operator that would determine the success of a jurisdiction's AB 939 implementation program.

4. Rail•Cycle provides the following resources that can assist cities and counties in complying with AB 939:

   - Assured disposal capacity.
   - Waste processing and recycling facilities.
   - Information useful in developing and monitoring waste diversion programs.

   Information that Rail•Cycle can provide for waste from MRFs that it controls includes total incoming waste volume, recovered volumes by recycled commodity, and residual disposal volume. The type and detail of the information available would differ from MRF to MRF depending on the types of users and contractual requirements under which the waste is received.

Response 045-54

1. The distance that waste would be transported by rail to the proposed landfill is a function of where specific MRFs would be located. As only the location of the City of Commerce MRF is known at this time, it would be speculative for the EIR/EIS to assess specific impacts from unknown locations of potential MRFs. CEQA and NEPA do not require speculation.

2. To address the issues associated with the transport of waste from unknown MRFs to the proposed landfill, this EIR/EIS includes a programmatic analysis of up to seven MRFs as part of the Rail•Cycle system. The EIR/EIS evaluate impacts related to the transfer of solid waste by rail to the proposed landfill. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs were evaluated in the Draft EIR/EIS in Sections 5.7, 5.8, 5.12 and 5.13, respectively. Additional information regarding transportation and noise impacts along the rail-haul route was included in Sections 5.4 and 5.5 of the Supplement.

3. As specific locations for MRFs are identified, site-specific permitting (including CEQA analysis) will be performed for each MRF.

Response 045-55

1. As discussed in the Draft EIR/EIS, the expected life of the proposed landfill is 60 to 100 years, depending on the rate of waste disposed at the site. The 100 years reflects the maximum limit of the life of the proposed landfill.

Response 045-56

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 045-57

1. Rail•Cycle, the County and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, would meet that need by helping satisfy the state's requirements, mandated by AB 939, for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise feasibly be reduced at the source, recycled, or composted.

[1] From: Cal French at Sierra-Club-SF 2/11/93 2:59PM (6640 bytes: 109 ln)
To: UFD=SIE208/DDT2=SYS/DDV2=00141/ (Joyce Burk) at DLC-SIE, Freeman Allen
(Liz Allen) at Sierra-Club-SF, Joan Taylor at Sierra-Club-SF
Subject: Railcycle

------------------------------- Message Contents -------------------------------

Dear Joan, Peter, and Liz,   from Letty

Here are my comments for public hearing 2/11 at San Bernardino.

My following comments represent only a few of the many concerns that the Sierra Club has concerning this project. We will provide extensive written commentary.

This DEIS/DEIR is inadequate in establishing the need for ①
this particular project. It does not address the ②
consequences of the "No Action" alternative as compared to
the consequences of the addressed alternatives. It does not
consider the details of other landfill possibilities within ③
the Southern California region or the effects of required
recycling which can reduce by 50% the need for future
landfills. It does not show that this dump is significantly ④
better than "no action"

OPEN SPACE

One of the biggest influences that cannot be mitigated is the
loss of Open Space. Two thousand, one hundred acres of open
space are to be turned into an 800 ft high mountain of trash, ⑤
with 2,700 acres affected by support facilities. This is
contrary to both the current BLM management plan and the
County's Open Space designation which covers this area.
The County Development Code requires a project meet at least
one criteria to be considered for development. While it
may meet the first one ..."requires a remote location..." it ⑥
fails to meet a second one " The land use is deemed essential
or desirable to public convience or welfare." By failing to
address the "no action" alternative it cannot prove to be
essential and it is certainly not desirable. It also fails
to meet the Management Goals for the San Bernardino County
General Plan which are listed on p4-14-1. #1 states
..."maximum preservation of open space, watershed, and ⑦
wildlife habitat areas." The County General Plan
acknowledges that "desert residents oppose the use of the
desert as a dumping ground for wastes generated elsewhere."
Current BLM lands are Class L & M which are not consistent
with a solid waste management facility. The proposed land
exchange will eliminate the BLM 's 2 1/2 sections of land ⑧
from open space. Over-all, this is an overwhelming loss of
open space and must be compensated for. If this proposal was
for the developed valley region of the County, the project
would be smothered by outraged citizens. Its footprint is
roughly one-half the size of the city of San Bernardino. ⑨
What is the mitigation for this huge loss of open
space?

WATER CONSUMPTION

Water is a precious commodity in the desert. This DEIS/EIR ⑩
estimates that the total annual consumption could be 2,380
acre feet/year, but the total annual consumption may be
7,800acre feet/year. Bolo's estimated draw of 67-83 acrea
feet/year certainly would result in over-draw. Surrounding ⑩ CONT.
neighbors will be impacted as well as water sources
for flora and fauna. Suggested mitigation is drilling a new
well - how does that help? Groundwater withdrawal has led to
noted ground subsidence - what is the mitigation for this?

NOISE

The noise level is stated to be under acceptable level and
workers will have proper safeguards. However, this facility
will operate 24 hours per day. ANY NOISE will impact the
quiet of the desert night. Wildlife will be affected, not to ⑪
mention the recreational desert user looking for peace and
solitude. Desert residents generally state they live in the
desert to avoid such impacts. What mitigation is offered -
none!

VISUAL

As stated, this project will be visible for 20 miles from the
south at Sheephole Summit and from many other areas. It
will be a blight on the landscape for a 100 years.
Mitigations to cap and cover individual pits are the pits.
The use of a one foot cap of soil will drastically change the ⑫
vegetation that can survive with such shallow roots. Desert
plants require extensive root systems to survive in this land
of little rain. There must be better mitigation or
compensation for the loss of visual attractiveness.

ENERGY

There is no committment to utilizing the energy developed in
the landfill, even though the possibility is recognized. ⑬
This is a valid energy source and should be utilized if this
project is ever approved.

There are many other environment impacts lacking sufficient
mitigation in addition to the ones mentioned. Trains are ⑭
scheduled to run at night, when desert wildlife is most
active. How much air pollution will this project produce? ⑮
Many, many questions are unaddressed and will be the subject
of written commentary.
Because of multiple mitigation problems, the
Sierra Club sees the need for a Citizen's Advisory Task Force
to work on the many problems presented. It should be ⑯
made up of various environmental groups to work with the
County and Rail.cycle.

Louise French
Solid Waste Committee Co-Chair
San Gorgonio Chapter
Sierra Club

DOCUMENT 046
SIERRA CLUB, SAN GORGONIO CHAPTER - LOUISE FRENCH
RESPONSE TO COMMENTS

Response 046-1

1. Chapter 2.0 of the Supplement presented an expanded analysis of the purpose and need for the proposed action. The analysis confirmed that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by Los Angeles County.

Response 046-2

1. Chapter 5.0 of the Draft EIR/EIS evaluated the potential impacts of both the proposed action and its alternatives, including the No Action Alternative, Reduced Action Alternative and Cadiz Valley Alternative site. Section 1.7 of the Draft EIR/EIS compared the merits of the alternatives and concludes that the No Action Alternative is the environmentally preferred alternative, and that of the remaining alternatives, the proposed action is the environmentally preferred project.

Response 046-3

1. The proposed action has been designed to accommodate, at least initially, solid waste generated by Los Angeles County that cannot be disposed locally. As discussed in Chapter 2.0 of the Supplement, efforts to develop additional landfill capacity in Los Angeles County have not been sufficient to accommodate the large volume of waste projected to be generated, even after AB 939's mandated diversion requirements are met. AB 939 requires cities and counties to provide for at least 15 years of capacity for environmentally safe landfill disposal, in recognition of the fact that landfill disposal of solid waste that remains after the diversion requirements of AB 939 are met, is essential to the public health and welfare.

Response 046-4

1. The No Action Alternative, while it would eliminate the significant unavoidable environmental impacts identified for the proposed action at the Bolo Station site, would not eliminate the need for substantial additional landfill capacity. It can be assumed that this capacity would have to be developed elsewhere in southern California, especially since one of the requirements of AB 939 is that cities and counties demonstrate at least 15 years of landfill capacity. As the significant unavoidable impacts associated with the Bolo Station site (visual change; air quality; use of ground water) would, with the possible exception of ground water use, be the same at any other landfill site, the potential exists that these other sites would have greater environmental impacts than the proposed action.

Response 046-5

1. As discussed in the Draft EIR/EIS and refined in Chapter 3.0 of the Supplement, the final elevation of the proposed landfill is a maximum of 450 feet above the elevation of the surrounding terrain, rather than the 800 feet suggested by this comment.

Response 046-6

1. See Responses 046-1 and 046-4.

Response 046-7

1. Although the proposed action alone appears quite large, the project would result in the loss of only approximately 0.04 percent of the total available open space in the County desert region. In addition, the majority of the project site would be reclaimed with only approximately 300 acres projected to be permanently lost. The proposed action would not affect any watershed. Furthermore, the proposed action would not affect any critical wildlife habitat area. Thus the proposed action is consistent with the Management Goal of the County General Plan referenced by this comment.

Response 046-8

1. The two and one-half sections (1,600 acres) of public lands managed by BLM that would be affected by the landfill would be exchanged for three sections (1,920 acres) of higher quality land with regard to open space and natural resources. This exchange would assist BLM in attaining its goal of consolidating ownership of public lands.

Response 046-9

1. See Responses 046-7.

2. As discussed in Section 3.7 of the Draft EIR/EIS, the site selection process for the proposed landfill included a criterion that the site should be compatible with existing and future land uses. This criterion included consideration of regionally

significant existing and future open space resources such as the East Mojave National Scenic Area, WSAs designated in the CDCA, the WSAs proposed for inclusion in the pending California Desert Protection Act, and the proposed Mojave Desert National Park included in the pending California Desert Protection Act. As discussed in Section 5.14 of the Draft EIR/EIS, the proposed project would not impact regionally significant existing or future open space resources.

3. The selection of the proposed site reflects in part a recognition of the existing development in the project area including:

   - Mineral production (salts) on and surrounding the Bristol Dry Lake (i.e., Cargill and National Chloride).
   - Modest development at Amboy and Chambless.
   - Transportation corridors (i.e., rail, road and pipelines).
   - Intensive agricultural operations at Cadiz (i.e., CLC).

   As noted in Section 5.14 of the Draft EIR/EIS, based on the avoidance of regionally significant existing and future open space resources, and the nature and extent of the existing development in the project area, while the proposed project is considered to have a significant impact on open space in the local vicinity of the site, the proposed project is not considered to have a significant impact on regional open space.

Response 046-10

1. Subsequent to distribution of the Draft EIR/EIS, additional analysis regarding ground water was completed for the proposed action and included in Sections 4.2 and 5.2 of the Supplement. This subsequent analysis concluded that the proposed action would not adversely affect other ground water users in the area (i.e., Cargill, National Chloride, or CLC). Cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin. In the event that Bristol Basin is in overdraft, it would be considered a significant unavoidable impact.

2. Based on additional analysis, ground subsidence is not expected to occur with the withdrawal of ground water for the proposed action.

Response 046-11

1. Potential noise impacts associated with the proposed action have been clarified as part of the subsequent analysis for the Supplement (Sections 4.5 and 5.5). The analysis indicated that noise impacts would not be significant and therefore do not require mitigation.

Response 046-12

1. It is expected that the proposed landfill would be visible for many miles, primarily because of its elevation above the mostly flat floor of the desert in the region of Bristol Dry Lake. Examples of how the proposed landfill would appear to a person looking south from Route 66 and looking west from Cadiz Road were shown in Figures 5.9.2 and 5.9.3 of the Draft EIR/EIS.

2. As stated in Sections 3.2.7 and 5.5.1 of the Draft EIR/EIS, landfill cells would be revegetated as a final step in the closure of each cell. Because the landfill would be developed and closed in segments, the portion that is absent vegetation would be minimized. Depending on the stage of landfill development, some portions of the site would be undisturbed, while others are receiving waste, being prepared to receive waste, being closed, or closed. This operational pattern would minimize visual impacts to the extent possible, given the size of the completed landfill.

3. Section 5.9.7 of the Draft EIR/EIS acknowledged that visual impacts would be significant and unavoidable and, in compliance with CEQA, would require a statement of overriding considerations.

Response 046-13

1. As discussed in Section 3.3.2.6 of the Draft EIR/EIS and Section 3.2.4.4 of the Supplement, one landfill gas flare would be installed when the landfill gas collection system begins to produce sufficient volumes to make operation of a flare practical. Based on anticipated waste volumes and projected landfill gas generation rates, sufficient volumes of landfill gas are expected to be generated within three to five years of the start of landfilling operations.

2. The flare would have a design and permitted capacity sufficient to handle the volume of landfill gas that would be generated on a daily basis through the initial operations. After 10 to 12 years, Rail•Cycle projects that sufficient volumes of landfill gas should be available to allow for efficient energy recovery, and an appropriate

energy recovery facility would be designed, permitted (including an appropriate CEQA analysis), and constructed. As the time period for an energy recovery facility is 10 to 12 years after the proposed landfill begins accepting waste, it would be speculative at this time to discuss the details of the facility that could be installed. Rail•Cycle would evaluate the technology available at that time and consult with regulatory agencies (i.e., LEA, CIWMB, MDAQMD and the County Planning Department) to determine the appropriate type of energy recovery facility to install.

3. The initial flare would be retained after installation of the energy recovery facility for emergency and overload conditions. Additional backup flares would be added, as required, to assure emergency capacity in the event of disruption in the operation of the energy recovery facility.

Response 046-14

1. As discussed in Section 5.6 of the Draft EIR/EIS, impacts to wildlife would be considered significant in the event of:

   - Disturbance of protected or sensitive species or of habitat that support such species.
   - Substantial diminishment of habitat for wildlife species.
   - Substantial interference with the movement of resident or migratory wildlife species.

   None of these impacts would occur from implementation of the proposed action even during night operations. Therefore, the mitigation measures proposed are sufficient.

Response 046-15

1. Based on comments on the Draft EIR/EIS, additional analysis regarding potential air quality impacts were completed for the proposed action. Sections 4.4 and 5.4 of the Supplement included refinement and reevaluation of the impacts and mitigation.

2. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMDs Air Quality Attainment Plan related to emission reductions for ozone precursors.

3. The estimate of combined NO_x and ROG project emissions at full development in the year 2010 is 1.7 tons/day, representing an increase in the current planning inventory baseline of 0.6 percent. To the extent that these emissions are not offset or mitigated in attainment plans adopted by the MDAQMD, these emissions could delay attainment of ozone standards.

4. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response 046-16

1. The County and BLM may wish to consider establishing a "Citizen's Advisory Task Force" as suggested by this comment. There are various mechanisms that could be used to establish such a group including the County's Solid Waste Advisory Committee. This committee is the county's response to AB 393's requirement for the establishment of a Local Task Force to oversee solid waste management issues in the County.

SECTION 2.5

INDIVIDUALS COMMENTS AND RESPONSES

047

Louis A. Conter
45-590 Hopi Road
Indian Wells, California 92210
(619) 345-4153

DEC 15 1992
CHAIRMAN BOARD OF SUPERVISORS

DEC 1992
RECEIVED
BY

December 11, 1992

Chairman - San Bernardino County
Board of Supervisors
385 North Arrowhead Avenue
5th Floor
San Bernardino, California 92415

Re: Bolo Station Landfill

Gentlemen:

In reference to the hearings for the Bolo Station Landfill. I would like to request a copy of the Environmental Impact Reports or a letter addressing the company or companies making the EIR's.

I am particularly interested in the liners being recommended for the project. It is highly recommended that a PPL-24 secondary liner be installed below the high density liner used to completely assure that no leakage to the underground water table will occur. ① High density although needed has been known to crack and/or rupture. It is believed the installation of a PPL-24 secondary liner, which has a much better longation factor will assure all concerns for any contamination or leakage below the proposed landfill. ②

Thank you very much for your cooperation in obtaining this report for me and noticing any hearings open to the public.

Very truly yours,

Louis A. Conter

LAC:bj

cc: Ron Perlatti, Bend Tarp & Liner Co.

DOCUMENT 047
LOUIS A. CONTER
RESPONSE TO COMMENTS

Response 047-1

1. The proposed double-composite liner system for the Bolo Station Landfill was discussed in Section 3.2.4.1 of the Supplement. As stated in these sections, Rail•Cycle is proposing the use of an alternative liner system that would include a 60-mil thick HDPE secondary liner.

2. The product referred to by this comment (PPL 24 by Bend Tarp and Liner, Inc. of Bend, Oregon) is a 24-mil thick flexible polyethylene fabric material. There is no indication the PPL material has been used or approved for use in a solid waste landfill, or that it has undergone the extensive leachate compatibility testing that HDPE and other landfill liners have undergone. As 60-mil thick HDPE meets the requirements of Subtitle D, there is no need to consider the use of the optional product referenced by this comment.

Response 047-2

1. The potential for cracking of HDPE is associated with liner systems exposed to repeated thermal cycles or irregular loading patterns. There is little potential for this occurrence in a subsurface primary or secondary landfill liner. It is for this reason, as well as its chemical stability and other structural characteristics, that HDPE is used in the majority of landfill liners in the United States.

048

JOAN C. WELCH
11991 DEEP CREEK ROAD
APPLE VALLEY, CA 92308

12-26-92
11991 Deep Creek Rd
Apple Valley Ca
92308

DEC 1992
RECEIVED
BY

County of San Bdno
Planning Dept
385 N arrowhead
3rd floor
S.B. Ca 92415-0182
Attn Randy Scott

I do not think Rail-Cycle is the way to go in solving our trash crisis —

We need local government to work for us and not let Big trash train companies dictate policy to us — ①

I think the Rail-Cycle proposal presents tax payers with many economic liabilities such as contamination of air & groundwater, clean up cost in event of toxic spills, etc — ②

Only the County can integrate various programs with cities — keep it local & not with Giant corporations in it for profit only — ③

Sincerely
Joan C. Welch

DOCUMENT 048
JOAN C. WELCH
RESPONSE TO COMMENTS

Response 048-1

1. Owners/operators of landfills do not dictate policy, rather they are governed by several agencies assuring compliance with environmental regulations. SBCDEHS acting as the LEA would be the agency issuing the final permit for construction and operation of the Bolo Station Landfill. Other agencies governing operations and monitoring of landfill sites are the RWQCB, MDAQMD, CIWMB, and the County Planning Department. Each of these agencies have regulatory jurisdiction governing the operation of landfills in the County and the state.

Response 048-2

1. CCR, Title 23, Chapter 15, Article 5 requires the owner/operator of a landfill to establish financial assurance for a "reasonably foreseeable release" of liquid or gas from the landfill. The financial requirement must be complied with by both public and private operators. CCR, Titles 14 and 23 also requires the financial assurance of the owner/operator to complete the closure/postclosure operations of the landfill.

2. WMNA and ATSF, as joint venture partners of Rail•Cycle, have the financial capability to provide the required assurances. No public liability would be assumed for any unlikely noncompliance activities. Rail•Cycle will provide at the time of issuance of the respective permits for construction and operation, the necessary assurances for "reasonable foreseeable releases" and "closure/postclosure."

Response 048-3

1. Local governments have responsibility for compliance with AB 939 and other statutes governing solid waste management practices. Each responsible jurisdiction may determine what mix of public sector and private sector facilities and services will best serve its needs. Rail•Cycle is a private sector system of regional scope that would provide individual municipalities with a solid waste disposal option based on their specific situation and requirements.

049

1/3/93 DUMP.LET

DEAR MR. SCOTT:

Once again I must confess to both amusement and concern about the Rail-Cycle (Waste Management, Inc) program proposed for the high desert. The problem is not so much the concept (in this case I bow to the need and consider any statements about the ability to protect groundwater as impossible to guarantee) as to the contractor. Have you read the report from the San Diego county district attorney? Having only seen part of it myself, I would still have major, major reservations about having this company involved in waste management. I fear that the logic being used here is that the dump site would be far enough away from population centers to be concerned about what few people would witness or be affected by any improprieties on the part of the waste handlers. I also feel that since the effect of potential problems from this project being mishandled are only to be felt in the distant future, the gains from a temporary "solution" are the only things being considered. ①

A major reason for our escalating waste problem is the failure of local governments to address the population problem - that is a given and will be a continuing problem since the solutions would be felt for some time and would not be very popular with voters. Another reason is the crisis management practiced by local governments - don't do it until there is no way around it anymore. Certainly a shortsighted approach at best. I graduated from college in 1972. My college town had a basic recycling program in effect at that time. San Bernardino didn't actively endorse such a program (along with carpooling, flexible work hours, etc) until threatened with fines. Not a glowing testimonial to the foresight of local officials. Recycling seems like such an obvious solution one wonders why conditions are allowed to deteriorate before such solutions are even recognized. ②

It will be interesting as this "latest" crisis unfolds. I do not expect much deviation from the past, but at least I can hope that there will be some. So much is needed.

Thanks for your time,

William M. Raisner

WILLIAM M. RAISNER
231 East County Line Rd
Calimesa, CA 92320

RECEIVED
JAN 1993
BY

DOCUMENT 049
WILLIAM M. RAISNER
RESPONSE TO COMMENTS

Response 049-1

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 049-2

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:

   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

050

JAN 1993
RECEIVED
BY

January 27, 1993

Mr. Randy Scott
County of San Bernardino, Planning Dept.
385 N. Arrowhead
San Bernardino, Ca. 92415-0182

Dear Mr. Scott;

As a resident of Twentynine Palms I am adamantly opposed to the proposed Rail-Cycle dump in Amboy.

I love the desert. I resent the city folks who think this area should be a dumping ground for their excessive trash.

I attended the public meeting here two years ago. The Rail-Cycle people actually said they would transplant the creosote bushes that would be removed for the dump. These people are out of touch with reality. ①

A dump is not the answer. A more aggressive recycling program is. Until this year I had to drive to San Bernardino to recycle newspaper, non CRV glass, and plastic. Most people won't drive 100 miles to recycle, but I'm sure they would make the effort if recycling bins were available. ②

Please STOP the Rail-Cycle project. Don't risk this unnecessary desert destruction.

Sincerely
Judith A Pruitt
Judith A. Pruitt

P.O. Box 891
29 Palms, Ca. 92277-0891
(619) 367-3353
FAX (619) 367-1554

DOCUMENT 050
JUDITH A. PRUITT - JANUARY 27, 1993
RESPONSE TO COMMENTS

Response 050-1

1. The concept for revegetation of the landfill site has changed since the initial public meetings were held. Originally it was planned that creosote bushes from the Bolo Station site would be removed prior to grading, maintained in a separate area, then replanted on the completed landfill surface. Since that time, Rail•Cycle has consulted with botanists at the NPS - Joshua Tree National Monument Center for Arid Land Restoration.

2. According to NPS experience with revegetation at the Monument, native desert plant species require a range of 1 to 3 feet of topsoil for revegetation (Moon, 1993). A depth of 3 feet is specifically recommended for revegetation of creosote bush, the dominant plant species at the proposed Bolo Station site. Based on this information, Rail•Cycle has modified its concept for placement of stockpiled topsoil and revegetation as part of the phased closure of the proposed landfill (see Section 3.2.7 of the Supplement).

3. A mitigation measure has been included in the EIR/EIS that requires Rail•Cycle to develop a detailed revegetation plan for the proposed landfill in consultation with the NPS, Joshua Tree National Monument. This mitigation includes a requirement that Rail•Cycle establish a nursery at Bolo Station for germination and growth of native plants for use in revegetation at the landfill. These nursery-grown native plants would then be transplanted to closed landfill cell surfaces and planted in an island configuration, similar to the surrounding plant communities. Plants would be artificially watered using drip irrigation for one to two months. If drought conditions exist, the irrigation would continue as necessary until the root systems of the transplanted shrubs become established. Overhead irrigation may be temporarily used on the landfill sideslopes to assist in the initial establishment of the revegetation; however, only a drip irrigation system would be used on the top slopes of the landfill. If long-term irrigation is required on the sideslopes a drip system shall be installed.

Response 050-2

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirmed that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Ray Kirkham
7424 MORNINGSTAR RD.
TWENTYNINE PALMS, CA 92277
(619) 367-1973

February 1, 1993
File: OVWCL

To:
County of San Bernardino, Planning Department
385 N. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182
Attn: Mr. Randy Scott

From: Ray Kirkham

Subject: Overview and Comments and Objections to content of Draft Environmental Impact Report/Environmental Impact Statement Rail-Cycle Bolo Station Landfill (State Clearinghouse No. 91092020).

Dear Sirs:

This overview and the critique which follows are submitted for inclusion in the administrative record of agencies involved in consideration of the Rail-Cycle Bolo Station Landfill Proposal.

I cannot begin to describe This EIR/EIS document without a few words about the character of the document. This document has been prepared with Machiavellian attention to avoidance of discussion of major project flaws and far-reaching socioeconomic impacts. It goes into intricate detail and publishes reams of charts, tables, and graphs on topics which are essentially immaterial relative to the proposed project. Examples of this include: Morongo Basin housing availability, school district data, inventories of small local agencies (most of which have not been contacted), distant mineral inventories, and pages of abbreviations and internal ATSF data. ①

This EIR/EIS spends a lot of its efforts referring to tiers of local coastal agency regulations and policies which appear to mandate exportation of garbage from the South Coast Air Basin. This, the EIR/EIS translates as an import mandate to inland counties. ②

The reasons for export are as valid at the proposed destination as they are at the point of origin. The EIR/EIS tacitly implies that nearly pristine air, for example, is an ideal diluent for the massive emissions this project would produce. ③

Environmental Solutions (ES), a firm located in Irvine, California, has consistently assumed a project advocacy role in the preparation of this EIR/EIS. ES has shied away from the seamier aspects of this project, with a regularity which cannot be regarded ④

as accidental. Major problems with this project which have been ignored are summarized below: ⑤

1. The likelihood that the project would have adverse impacts on the Southern California Waste Industries as a whole.
2. Economic impacts on Southern California Business.
3. The inherent structural instability of free standing piles of waste with biologically active components.
4. Likelihood of waste losses from site due to weather conditions, unexpected water flows, breakdown of plastic liners, etc. (The dump area itself needs to be treated as a watershed for a 100 year storm.)
5. Air pollution, noise, and public safety impacts at pinch points in the proposed waste transportation system. (San Bernardino Valley)
6. Reasonable local disposal options for Los Angeles, Orange, San Diego, Riverside, and San Bernardino Counties. This is the most likely no-project scenario. (Maximum 67 mile haul radius between local landfills.)
7. Waste Management of North America Inc.'s (WMI's) and the Atchison Topeka and Santa Fe Railroad's (ATSF's) long history of EPA violations and creation of Superfund Sites.
8. WMI's long history of anti-trust convictions.
9. The EIR/EIS fails to accurately assess the weak regulatory and enforcement environment present in San Bernardino County which the public would rely on for enforcement of mitigation and remediation measures.
10. The EIR/EIR fails to assess the possible importation of garbage from states to the east of the Bolo Site. Rail lines run both east and west from Bolo Site, yet maps in EIR/EIS stop at Arizona border.

The purpose of the EIR/EIS process is protection of the public and the environment from unsound projects and operations. This EIR/EIS is flawed beyond repair.

EIR's are supposed to give as accurate a picture as possible of conditions proposed projects would produce. EIR's are supposed to clarify understanding, not bewilder and obfuscate.

I recommend, on the basis of review of the above mentioned EIR/EIS, that all involved agencies deny this project and all its proposed alternatives in their entirety.

I am a private individual, not on retainer from any firm whatever and make no pretense at a complete analysis of this ponderous volume. Certain sections are so flawed, they are separately critiqued in the following document (A Critique of the Rail-Cycle Bolo Station Garbage Dump Proposal). Each topic will be labeled with the appropriate EIR/EIS nomenclature if applicable.

Yours truly,

Ray Kirkham

Ray Kirkham

A CRITIQUE OF THE RAIL-CYCLE BOLO STATION GARBAGE DUMP PROPOSAL

Ray Kirkham

February 1, 1993

COMMENT AND OBJECTION

General:

CEQA (Section 15123 (b)(3) and NEPA (40CFR 1502.12) require the EIR/EIS summary to identify "issues to be resolved including the choice among the alternatives and whether or how to mitigate the significant effects." Neither the draft EIR/EIS nor the text addresses this issue. ⑥ All assumptions as to which alternatives may be considered are predicated on the first half of a South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) proposed control measure (A-D-1), which text closes thus:

> "If potential emission reductions from out-of-basin transport of biodegradable solid waste are estimated to be minor or insignificant, alternative control methods utilizing the best available control technology at disposal sites within the Basin will be developed." ⑦

This clearly defines the alternative SCAQMD regards as the alternative to the project, rather than a less energy-efficient alternative long-range trash hauling operation. The EIR/EIS preparers have assiduously avoided any consideration of high-tech in-the-basin approaches to waste treatment and disposal.

The EIR/EIS preparers make frequent references to specific paragraphs of regulatory text, excising them from the context and attaching undue importance to minor passages and ignoring the overall meaning of the texts. For example, the primary difficulty in siting in-the-basin landfills has been, according to the A-D-1 Background text, "opposition from neighboring citizens," a political and conceptual problem, not necessarily an "environmental" problem. ⑧

The alternatives the preparers have provided for discussion are singularly unrealistic and clearly not viable. The preparers have not provided a clear assessment of the lack of available landfill space in the proposed market area for their garbage hauling operation, and have not evaluated this in light of the best available waste treatment technologies. ⑨

CEQA (Section 15147) requires technical information sufficient to permit full assessment of significant environmental impacts by regulatory agencies and the public. As explained in other comments herein, the technical assumptions and conclusions presented in this draft EIR/EIS are poorly documented. There is an attempt on the part of the preparers to force reviewers to accept much of the data presented at face value, leaving them unable to independently evaluate the appropriateness of the consultant's conclusions.

Without far more widely ranging and far more detailed documentation, it is not possible to conduct a careful and comprehensive assessment of the report's conclusions.

COMMENT AND OBJECTION

2.6.2.1 & 2.6.2.2 AIR QUALITY The EIR/EIS treats the Rail-Cycle project as if it were simply an activity being carried out in San Bernardino County and only subject to regulatory oversight from the San Bernardino Air Pollution Control District in regard to air quality impacts. This is much akin to being asked to only consider the head of the octopus because only its head is in the county. The Rail-Cycle project is the sum total of the entire operation from collection to material recovery to final disposal. ⑩

This is especially true as the EIR/EIS states that WMINA's policy will be that Bolo Station will not accept material from MRF's which do not conform to WMINA's standards. A truthful assessment of this is "from WMINA's facilities only." WMINA will monopolize all aspects of the waste business in Southern California and beyond both horizontally (market share) and vertically (all processes). If this is even a remote possibility, then current CEQA guidelines are clearly not capable of defining the methods necessary for evaluating the project. ⑪

In truth, all Air Quality Management Districts in which this vertically integrated project would operate NEED regulatory oversight authority. While the project requires unified regulation, it is not possible under existing law. This appears to be another way to OPERATE OUTSIDE THE LAW. Policies approved in one district would be applied in other districts by WMINA and could be used for "squeeze and sweat" purposes in other districts. ⑫

COMMENT AND OBJECTION

3.3.2.1.3 Daily, Intermediate and Final Landfill Cover.

Objection: This section of the EIR does not properly address the operation considering the conditions which exist at the site and does not consider the nature of materials which would be landfilled at the site. The proposed Bolo site is in an exposed area where winds (shown only as "above 21 miles per hour" in the EIR) may reach speeds in excess of 70 miles per hour. Additionally, these winds may go from calm to very high velocities within the span of FIVE MINUTES. ⑬

1. At any one time, according to the EIR, a working face of exposed trash would be 15 feet by 300 feet (first years) to 15 feet by 600 feet (later years) and as such, present an exposed trash surface of 9,000 square feet which would be constantly vulnerable to highly changeable winds. Normally, particulates are considered to be small particles, however in the highly dynamic meteorological conditions to be found at the Bolo site, it would not be unreasonable to expect materials the size of disposable diapers, milk cartons, foam cups, and even refrigerator boxes to be carried more than 20 miles from the site. Such occurrences are not unusual in the Mojave Desert as a whole, and more likely in exposed sites such as the Bolo site. ⑬ CONT.

The short term warnings which dynamic desert meteorological conditions allow will render the site unsuitable for large working surface dumps. There is no schedule of load and cover which can adequately protect the environment outside the confines of the dump and its so-called buffer zone from sizable escapes of large unsanitary objects.

Using Rail-Cycle's own figures of 3,000 tons per day, if 1/100 of one percent of this waste were to escape this process, the dump would emit over 600 pounds of tumbling, blowing solids per day...and even more on truly windy days. The Cadiz and Fenner Valleys and perhaps Bristol Lake would become repositories of escaped waste to the tune of over 100 tons per year at 3000 tons per day usage and 700 tons per year when the operation is at maximum capacity. ⑭

2. In the beginning, the Bolo operators intend to cover the working face daily and there would be periods during which waste would not be allowed to migrate off-site, however as the operation approaches capacity, it is made clear in this section of the EIR that the waste working face will be continually open 24 hours per day. This is a condition which the would-be operators would have exist for the next 60 to 100 years. ⑮

3. The EIR does not specify what they actually intend to use as daily cover and intimates that in all the environmental evaluations preceding the approval they will discuss using soil, however they would really want to use something else to be approved by bureaucrats later. This does not supply a clear and convincing picture of what the project will actually become and disqualifies the EIR as a true evaluation of the project. ⑯

4. Same comment as 3. above.

5. The EIR fails to define the materials or their suitability for intermediate covers as well. It is impossible to envision this structure made of unknown materials to be determined at some future date out of the public spotlight. ⑰

6. Final cover. The Rail-Cycle proposal is to cover the slopes with four feet of soil and the top with two feet, then to cap the whole thing with one foot of clay and finally one foot of topsoil and vegetation. This is one of the most seriously flawed parts of the whole Rail-Cycle idea.

From all indications, the Rail-Cycle dump is an ordinary dump using ordinary technologies. (See figure 3.10) No special treatment is given to this landfill or its lifts, which are not likewise explicitly prescribed for all other landfills in the state. The compaction equipment is the same as employed elsewhere in the state. Landfills which are surrounded by geological structures are possibly the least likely to continue settling as they have basement rock substrata. Even these landfills are unsuitable to support buildings. How much less stable is a landfill sited in sedimentary deposits? What chance has a clay cap of remaining intact in such a location...NONE!

⑱ There are to date, no examples of satisfactory free-standing dumps which do not slump and erode. I suspect there will never be. As the landfill continues to settle, the clay cap will fail. This will allow for inflow of water into the waste and expansion and contraction depending on the season, ultimately resulting in the unearthing of buried waste and compromise of groundwater.

The philosophy surrounding siting of landfills in the past has been to locate them in natural geological structures, preferably without outlets. Frequently canyons have been used (eg. Scholl Canyon). The focus of the protective measures in these areas is diversion of customary water flows, and blocking pathways for outflow of leachate. While less than perfect, these efforts utilized at least some of the works of nature, letting the natural environment contribute to security of the system.

The Bolo Station, to the contrary, stands exposed on all sides like a giant soft pyramid in the desert, of sufficient size that it constitutes the watershed which will be its undoing. According to the EIR, this project is built on SAND. Hence, once liquid contaminants escape its confines, there is widespread dispersion in all directions. As a liability to water resources, it stands as a proposed quintessence.

⑲ 7. Rail-Cycle again asks the public and regulatory agencies to accept consideration of one type of containment system, then in the same EIR proposes that it will actually be using other materials not considered in the EIR. Here, I am referring to a 40 mil HDPE flexible membrane in place of the clay cap they have just described.

HDPE is high density polyethylene...a slightly more durable and stable material than LDPE, the material throw-away milk jugs are made of. Polyethylenes are all subject to photolysis and photooxydation. That means they break down with exposure to the sun. The breakdown is especially rapid in the high insolation at the Bolo Site. Hence, any erosion of the topsoil exposing this membrane (only 12 inches of topsoil is called for) will rapidly compromise the integrity of this cover. ⑲ CONT.

⑳ Can we expect this material to survive one, two or three years? Rail-Cycle will not answer. What about 60 to 100 years. Let us be reasonable. HDPE belongs in a dump, not on it!

㉑ 8. The HDPE cover represents the "worst case" scenario if there remains such distinctions in the face of the "worst case" scenario of Rail-Cycle being approved and put into operation. The EIR should address the cost of continuous maintenance on closed cells to restore integrity whenever integrity is lost. It appears that the Rail-Cycle dump would be a constantly rupturing and shifting affair...a moveable feast, so to say.

COMMENT AND OBJECTION

4.15 Socioeconomics

㉒ This section of the EIR is conceptually flawed beyond repair. I cannot believe that environmental experts can possibly study the Rail-Cycle dump proposal without becoming aware of the gross socioeconomic effects a project this size creates. The EIR focuses on only a few San Bernardino County impacts and ignores impacts which are easily 100 fold greater than those covered. As most of the large impacts are completely ignored in the EIR, I shall depart from the EIR format and present the ignored material in a logical, sequential fashion below:

A. HISTORY

㉓ The EIR refers obtusely to AB 939, California's recently enacted Integrated Waste Management Act. This bill was passed with a single NAMED private sector advocate listed...Waste Management Inc. of North America (WMI). Rail-Cycle is a WMI project. This project is a part of a greater pattern of WMI activities which tends to restrain trade and create a monopoly.

Waste Management Incorporated of North America's long history of anti-trust convictions coupled with an even longer history of EPA citations is germane to any consideration of its competence, ability and will to limit negative environmental and economic impacts of its operations.

The permitting process is not a judicial proceeding and hence the scope of its inputs needs to consider whether or not the applicant is likely to produce the results it describes. Those who approve permits are the public's protectors and need to accurately assess past as well as the applicant's predicted performance. The rules of evidence applied to criminal trials need not apply in the permitting process or the EIR process. This is critical especially in cases where there is the likelihood of anti-trust violations. Others will surely come forward with reports from the Clearinghouse for Hazardous Waste and the San Diego County District Attorney. These should be made part of the public record and duly considered.

B. SOUTHERN CALIFORNIA IMPACTS are not acknowledged in the EIR.

1. No mention is made of the disruption tactics of WMI aimed at taking over all aspects of Southern Calif. waste businesses.

   a. Project would hasten and perhaps even finance closure of many Southern California landfills, due to creation of economic conditions in which they cannot operate.

   b. Small waste collection firms impacted by AB 939 will be driven out of business by recycling requirements and high ultimate disposal costs. Rail-Cycle becomes the ONLY OPTION for many. There is no price regulation in this business.

   c. WMI, through its intense lobbying effort played a major role in establishing criteria for Material Recycling Facilities (MRF's), while designing their own. MRF's will be dominated by WMI as a result of inside early knowledge. This places small refuse services and agencies in the position of having to purchase all waste related services outside of primary collection from WMI. There are hundreds of small Southern California firms which will be impacted if not driven out of business by WMI in Southern California. Rail-Cycle is but one link in a chain of operations aimed at the establishment of a WMI monopoly in California.

   d. San Bernardino County Impacts---The EIR has not addressed business and government impacts in San Bernardino County. Rail-Cycle must be viewed in both the Waste Business and Total Business context.

      1. The success or failure of the competing project at Eagle Mountain has reciprocal impacts on Rail-Cycle.

      2. Taxpayer cost per ton of waste dumped would be impacted. Rail-Cycle's own projections indicate a ten-fold cost increase (1000% or 40% per year) between 1975 and the year 2000. Such cost projections would be rendered "true" and "justified" if this project is approved and carried forward. These costs would impact virtually every business and household.

㉓ CONT.

3. Promising alternatives will not be pursued by current advocates or co-opted by WMI.

   a. High-rate digestion of solid waste residuals.

   b. Landfill reclamation (mining and re-use)

   c. Various biomass conversion processes

   d. Source reduction efforts would be stifled by an industry geared for dumping and charging heavily.

   e. San Bernardino County Waste Management Department, while now rated dead last in the state, would become even more eviscerated. The Department would consist of only a few bureaucrats to deal with WMI.

   f. WMI would be positioned to dictate terms to the county...and perhaps the state.

㉓ CONT.

COMMENT AND OBJECTION

Table 4.7.6 Air Quality Measurement Summary Bolo Station Site:

> Data in this table indicates analytical laboratory quality assurance problems. Values shown are erratic and variations in terms of absolute values exceed the control limits for the tests involved. This is especially pronounced in PM_{10} and O_3. Inclusion of data such as in this table without explanation of very unusual conditions indicates that the presenters do not understand the data they are dealing with or are expecting nobody to notice.

㉔

Table 4.7.7 Criteria Pollutant Attainment Status San Bernardino Portion of the Southeast Desert Air Basin.

The Area covered by the title heading is many hundreds of square miles in extent. The figures given are for a very large geographic area and are not sufficiently site specific to define conditions at either Bolo Site or the rail corridor. The vicinity of the Bolo Site has higher air quality than most of this "basin." The Southeast Desert Air Basin is a political definition and not a physical basin.

㉕

COMMENT AND OBJECTION

5.13 NOISE This section of the EIR/EIS is seriously flawed in three evaluation criteria:

A. Failure to model the actual noise levels which would exist at Bolo Site and along rail corridors. It utilizes calculated values which are not proven to reflect actual conditions, an example being the rail car switching which would occur in San Bernardino. This is not even considered. Neither does the EIR/EIS consider the noise impacts of the heavy traffic increases in the San Bernardino--Victorville corridor. ㉖

B. Noise environment is only mentioned in San Bernardino County. Project noise impacts extend to San Diego and Los Angeles Counties. ㉗

C. The EIR/EIS discards assumed incremental increases of less than 3dBA as establishment of a new base-line. Using the logic of the EIR/EIS, three increases of 2.9 dBA would not be "significant" because the "change" at each increase might not be "noticeable." Thus, they would write off an 8.7 dBA increase over time as "not significant."

Noise impacts on the human ear are not measured in terms of whether or not they are "noticed." People often go deaf due to exposure to loud noises which they ignore. The key to understanding noise is knowing there are threshold levels of noise at which the human ear starts to incur injury. The values are established by OSHA and I direct the drafters of the EIR/EIS to OSHA and the County of San Bernardino for guidance. ㉘

COMMENT AND OBJECTION

5.4.5.1 MITIGATION MEASURES

SURFACE WATER DRAINAGE:

This section of the EIR/EIS is conceptually flawed in terms of a full assessment of the pollution generation of the waste mass itself as well as a simplistic view of just what it takes to divert water flows in the desert. As I am writing this (January 18, 1993), our county has just been inundated with ten days of heavy rain. Localized runoffs from these rains have made cuts in the native soils and slopes ranging from 10 feet to 50 feet in depth. The soils upon which this erosion has worked are mostly natural and undisturbed. The erosion rate on man-made soil structures is even greater. ㉙

The EIR/EIS has not treated the landform of the proposed dump itself as a watershed landform. If it had, it would immediately be evident that the dump itself, with its undetermined, unknown liner and thin skin of dirt and vegetation would be subject to erosion forces so severe as to compromise its integrity. ㉚

Once the surface integrity of this structure is compromised and the storm waters invade the waste mass, the applicant's only suggested mitigation is the bottom liner and leachate collection system. This may prove to be altogether immaterial to the issue as the compromised waste mass will deform and perhaps spill over the "containment berms." ㉛

Whenever extremely large structures are contemplated, in the world of civil engineering, it is necessary to provide structural rigidity. The degree of reinforcement required is determined by stress analyses. The proposed Bolo dump is a proposal without a backbone. Such a structure as is proposed has no hope of withstanding the natural forces which will be applied to it in the next 100 years. ㉜

Surface runoff will be largely dependent upon the nature of the surface and the likelihood the surface will deform or erode or both. ㉝

GROUNDWATER:

The Bolo site overlays a portion of the Bristol Groundwater Basin (see figure 4.4.7 in the EIR/EIS). The area it overlays is characterized in the above mentioned figure as "mostly sand and gravel." These soils constitute a lens to the groundwater. This means that, to not pollute this aquifer, all landfill fluids must not escape the dump. ㉞

The American Society of Civil Engineers has run studies on the efficacy of the type of HDPE liners proposed by the applicant for this project. No liner has been found at this time which is 100% effective at containing liquid.

Waste Containment Systems: Construction, Regulation, and Performance, ASCE Geotechnical Publication No 26, 1990 concluded:

"All of the double-lined landfill cells reviewed in this study that were constructed with geomembrane top liners exhibited top liner leakage." and...

"Based on the data in this study, an action leakage rate of 50 lphd* is too restrictive and presents a performance standard that, if promulgated by the USEPA, frequently will not be met by facilities that were constructed to present standards with rigorous CQA programs." (* 21 gallons per day per acre) ㉟

Such findings should not be construed to mean that landfill liners are without merit, but rather that they should not be employed in massive projects comprising several square miles. The containment task is compounded with the sheer size of the project.

Reliance upon a 60 mil HDPE liner to provide a barrier against waste mass liquid component migration to groundwater is reliance upon failed technology. When these fail, the project drains directly to groundwater. At least 66% of the project area appears in fig. 4.4.7 to be an unconfined aquifer. ㉟ CONT.

As the project overlays a boundary between brackish and fresh groundwater, pumping in this area, either for remediation or for supply will cause this boundary to change. As fresh water is most often sought as supply water, it is likely the direction of movement will be toward the "up gradient" edge of the project area.

The monitoring system proposed (a series of monitoring wells) is apt to be insensitive to finger plumes and will only detect pollution when such leaks have already become extensive. As all HDPE liner systems leak, the remediation system becomes paramount among the mitigation measures. ㊱

The installation of a system which will certainly pollute the groundwater should not be allowed, regardless of the remediation capabilities of the polluter. The applicant's Rail-Cycle's parent companies Waste Management Inc. or North America and Atchison Topeka and SantaFe Railroad both have long histories of polluting operations which required remediation and which have not, as of this date been remedied. ㊲

One notable local example of ATSF pollution is the Barstow Slug, a plume of oily hydrocarbon pollution in the Mojave River groundwater. It is the business of the environmental review process to consider also, the likelihood of the applicant's will and ability to clean up its environmental accidents. In the case of the Barstow Slug, this pollution remains a critical problem in the region's Water Quality Control Plan. Waste Management Inc. has a thick dossier of environmental pollution crimes to its credit. It seems unreasonable for the local agencies to close their eyes to the low quality of the previous operations of these two companies and simultaneously take THEIR WORD ONLY that unproven technologies will work well in this case. ㊳

At the end of this report, I have appended enclosure A, a summary of the report of ASCE tests on HDPE liners.
COMMENT AND OBJECTION

5.7.4 NO ACTION ALTERNATIVE:

This section of the EIR/EIS attempts to make a comparison between the Rail-Cycle dump proposal and some other vaguely defined truck operation wherein the average truck miles per load is 100 miles, one way. For the average truck haul to become 100 miles, the facility at the end of the line would be simply another unmanageable and vulnerable Rail-Cycle-like dump...also in the desert. ㊴ ㊴ CONT.

The justification for establishing Rail-Cycle appears to be bureaucratic in nature...namely Los Angeles and Orange Counties' reluctance to properly manage their land use and their inability to control growth. The necessity for landfill capacity must be part of any county's overall land use policy.

What Los Angeles and Orange Counties specifically are seeking through support of projects such as Rail-Cycle is to unburden themselves of the requirement to dispose of their own waste. They seek to utilize land in their jurisdictions which should be earmarked for solid waste disposal (now or later), not for open space uses, but for further growth and development. This further growth will produce profits. The cost of Rail-Cycle will be shouldered by every southern Californian. ㊵

Proposals such as Rail-Cycle must all be turned away from San Bernardino County in toto as they have the effect of reducing the potential of this county to develop. There are, of course, the primary impacts of the project itself, with its flying waste, unstable soil and membrane structures, water, and air pollutions. These are localized growth inhibiting factors.

Far more significant is the GREEN LIGHT FACTOR this project will have on Los Angeles, Orange, Riverside and San Diego Counties to permit more growth in their territory...growth which San Bernardino County will not experience. The tipping fees are small consolation in comparison to the advantages and profits a county can accrue from quality development and land-use management. This is a county-wide concern...not just a Barstow Area--Morongo Basin concern.

The alternative this writer proposes is a 45 mile average haul one way with a maximum radius of service area of 67 miles. The counties of Southern California need to comply with their needs and not use state powers and money to dump on their neighbors. While the counties sit still and wait for one of the several mega-dump proposals to succeed, they are abdicating their responsibility in this matter. ㊶

At present, in terms of Air Pollution, the San Bernardino Valley must consider a no-action alternative a no-change alternative. Rail-Cycle alternative would add significant air pollution throughout the Southern California Area. It adds a whole layer of unnecessary operations and long range transportation to the waste disposal scenario.

San Bernardino Valley is a bottleneck in the Rail-Cycle transportation scenario. Virtually all of the garbage would pass through the city of San Bernardino, and spend some time adjacent to the already notorious Duffy St.

While the Rail-Cycle advocates have indicated that the garbage would be transported in sealed containers, it should be noted that these containers must be vented to avoid buildup of explosive mixtures of gasses and excessive pressures. These containers also will have long seal lengths as they must be opened on one entire side at the dump for dumping. ㊷

The Waste Management Inc. record for controlling its liquid waste component is an open book at the Environmental Protection Agency and this organization has been cited many times for serious environmental pollutions. The actual waste packaging and handling would be Waste Management Inc.'s responsibility.

No-project alternatives could involve some rail transportation as rail transportation is reasonable in terms of energy efficiency per ton mile. If only long distance scenarios and desert mega-dumps are considered, the advantage of rail is created with the addition of many unnecessary miles of transportation.

In an environmentally sound landfill program, the gas generated at the landfill would be used to provide a portion of the fuel for the trucks delivering to that landfill. This would yield a reduction in the area of irreversible commitment of resources. As landfill gas can be polished to produce a clean burning fuel, overall emissions from waste hauling vehicles can be reduced. ㊸

The EIR/EIS ignores new technologies such as high-rate digestion of waste solids. The EIR/EIS ignores landfill reclamation projects in the eastern United States. ㊹

The no-action alternative will not result in no action. The solid waste management legislative and regulatory environment in California is currently due to become fluid. The EIR/EIS cites a South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan "measure" which appears to mandate solid waste would be disposed of outside the South Coast Air Basin (SCAB).

This measure (Measure A-D-1) is no more than a decision of the SCAQMD to export its biodegradable solid waste based air pollution to other jurisdictions. It is a total abdication of responsibility on their part. This is totally unacceptable regulatory behavior and acceptance of this proposal by San Bernardino County government or the new desert AQMD is equally unacceptable. To adequately manage the air quality and adequately regulate waste disposal facilities requires the tax base of the communities which produce the waste. San Bernardino County has a very poor regulatory infrastructure and the tipping fees would be consumed in attempting to adequately deal with the air pollution alone. This proposal (Rail Cycle) proposes that ㊺

San Bernardino County absorb the entire impact of ALL OF SOUTHERN CALIFORNIA'S GARBAGE. ㊺ CONT.

It would pay for SCAQMD to straighten up and fly right...and not expect to be able to export air pollution. As a state mandated agency, its purpose is to protect air quality, not to shift smog.

Many of the so-called liabilities of the solid waste problem can be managed by new technology. The California Integrated Waste Management Board must initiate a whole raft of legislation centered not on recycling so much as source reduction. The simple truth is that bio-degradability of solid waste should be a targeted quality in the product design phase in consumer product manufacturing industry. Disposable products and packaging which is not bio-degradable needs legislative discouragement.

One of the impacts the Rail-Cycle dump proposal's success would be a RED LIGHT EFFECT, removing from agencies such as Los Angeles County, SCAQMD, CIWMB, and the State Legislature any sense of immediacy in dealing with either source control or recycling. This EIR/EIS seems to treat the solid waste problem as one which is easily managed, only so long as the waste is first transported some distance from the generation sites. ㊻

The no-action alternative is the only viable alternative. While it is true that the project could be consummated and result in some minor short-term improvements in coastal air quality, the project would severely impact air quality in San Bernardino Valley. The EIR/EIS does not demonstrate that even the coastal area air quality improvements would have any duration whatever. ㊼

We can be certain, however that the communities of San Bernardino Valley, of the Cajon pass, with its recreational outlets, of Victor Valley, of Newberry Springs and points east along the rail corridor would have higher quality air, water, public safety, and noise environments without the Rail-Cycle Dump.

This EIR/EIS paints a picture of a static society, without creativity, without the ability to change its regulations, its collection practices, its material consumption patterns, its life-style. This writer asserts that the current life-styles which are characterized by the Rail-Cycle proposal are themselves the product of artificial creations of the building industry, consumer manufacturers, and the media.

SCAQMD's Measure A-D-1 is a concession to lobbying by building industries, waste management industries, and ultimately to greed. Typical panels to control pollutions contain representatives of polluters. Sometimes it is very difficult to identify just which hat such an agency is wearing when it promulgates things such as Measure A-D-1.

Measures enacted in other counties by agencies without authority over the affected area should have minimal significance in the consideration of projects. These measures will change when they MUST. The no-action alternative is just the kind of input SCAQMD needs to induce it to a realistic assessment of solid waste impacts in the SCAB, and sufficient consideration of mitigation of these impacts within the basin.

COMMENT AND OBJECTION

7.0 OTHER REQUIRED CONSIDERATIONS:

Chapter 7 of the EIR is flawed in that it extends incomplete or faulty assumptions made in chapter 5 to conclusions which are entirely erroneous. The EIR makes assumptions that unproven or known faulty technologies will provide mitigations of which they are not capable. The EIR makes assumption that energy efficiency per mile can mitigate energy consumption for long hauls. The EIR makes the assumption that the drafter's faith in questionable technologies renders consideration of possible failures of such things as landfill liners unnecessary. Each of these issues will herein be expanded upon:

7.1 RELATIONSHIP BETWEEN SHORT-TERM USE AND LONG TERM PRODUCTIVITY:

1. "The environmental impacts of a proposed Class III landfill must be balanced with societal needs for such facilities." The EIR makes this statement here, then fails to demonstrate any societal need for such a facility. This paragraph nowhere illustrates any societal need for any Class III dump, including Rail-Cycle. It nowhere cites a shortage of dumps. It nowhere cites a shortage of possible dumpsites in Los Angeles, Orange, Riverside, San Bernardino, or Ventura County. A survey of each of these counties would certainly yield a number of far more suitable sites, with better geology, with better energy conservation parameters, and far better possibility of adequate monitoring. This is ever more so, if the technologies in which the EIR drafters believe in so absolutely are actually good. No need for this dump exists. No justification has been provided. ㊽

2. The statement that most impacts can be mitigated to below significance is a statement of faith in the integrity of the liner, faith in the efficacy of litter fences to contain debris (some of which may become airborne to heights exceeding 1000 feet in essentially a vertical flight pattern--containment not possible), faith in the structural integrity of a 420 foot tall structure of garbage and earth, faith in HDPE covers to withstand osmotic pressures exerted by water seeking ㊾

---

desert flora planted in 1 foot of topsoil, faith in HDPE to withstand sunlight. The rule for membranes in geological applications is that they will fail... it's just a matter of when. ㊾ CONT.

The document never discusses the nature of the waste. It treats waste as if it were merely contaminated dirt. Residuals from recycling are apt to have these qualities which lend difficulty to efforts to stockpile it in unsupported structures such as the Rail-Cycle dump:

a. Products such as disposable diapers, incontinent disposables, milk cartons, and plastic lined clothing have a lubricative effect upon the pile. These materials are apt to be unstable and never establish a condition described as "repose." Successive coverings of dirt merely add shear forces and will not add to stability.

b. Materials containing organic fibers, also rayon and certain other man-made fibers are hygroscopic. As water is absorbed into these materials, their compressed volume changes. This quality of the waste, changing volume, combined with lubrication will result in movement. Combined dumps with objects which are not lubricative and not expansive as part of their make-up would be more stable, however this is not the case with the proposed dump because AB 939 mandates these components be recycled. ㊿

c. Printed and colored matter will no doubt be a component of the waste. This material carries with it a heavy metal component in the pigments and inks. This component, in combination with the acids generated in the acid regression phase of digestion of the volatile component of the waste will provide an eluent to remobilize the metals in these pigments in some cases.

What we have here is a constantly shifting pile of waste with toxic components in a liner which cannot stand sunlight and which also cannot withstand shear forces. All arguments stating that the area groundwater will not be significantly impacted with pollution are simply without a single known referent to support them. (51)

3. Given the proposed method of operation, there would not only be long-term constraints on land uses, but also requirements to repair continual failures of waste and soil structures and possibly to remove them elsewhere. The corporate practices of the applicant corporation call for (52)

the taking of profits in the form of dividends etc. It is very likely that sufficient funding may not be available from the applicant to perform necessary long-term repairs and this burden would be loaded on the tax-payer. (52) CONT.

4. Avoidance of groundwater contamination can only be for the short term. All known liners for waste dumps leak. The latest state regulations for reverse osmosis reject water evaporation ponds rejects all flexible synthetic or natural membranes. How much more serious is the containment of dump leachate? Monitoring wells is not a mitigation. Once contamination is encountered by the monitoring system, remediation is called for. It may not be within the Rail-Cycle Corporation's means to remedy groundwater contamination in such a large aquifer with such large avenues of transmission of pollution. Regulatory review also is not a mitigation measure, though it can lead to mitigations...sometimes at taxpayer expense. (53)

5. Nobody can declare that the total stripping of 2100 acres of land is an insignificant impact. Nobody can say that 60 to 100 years of noise, filth, and massive earth displacement is an insignificant impact on the flora or the fauna of any area which is used for something like the Rail-Cycle proposal without either not understanding the project or compromising his personal integrity. (54)

6. The EIR treats air pollution impacts as only a temporary phenomenon with fugitive dust emissions declining after dump closure (some 100 years from now) and for several years thereafter, a slow decrease in landfill gas production. I do not personally believe that a 60 to 100 year long scheduled pollution of an area is temporary. For children yet to be born, this operation and its pollution would continue unabated till they are dead of old age. (55)

7. Today, the Bolo Site is mostly undisturbed land. At the end of the proposed action, the landform will have been altered and the actual condition of this olio of garbage and soil and plastics cannot be predicted. The rate of re-emergence of buried debris in the desert cannot be predicted. The conclusions of the EIR on this point are in error. (56)

7.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES:

1. It goes without saying that creating a landfill is in itself an irreversible commitment. (57)

2. Topography and visual quality of the area would be altered to an unpredictable condition...irreversibly.

3. Surface drainage patterns would be altered. Groundwater supplies would be reduced due to decreased recharge. Groundwater would ultimately become polluted by this dump. (57) CONT.

4. Energy consumption is poorly evaluated in this EIR. Energy consumption is an irreversible commitment of resources. Excessive energy usage is one of the gravest flaws in the Rail-Cycle proposal. According to the EIR, trains move freight at the rate of 237 ton miles per gallon of diesel. Typical trucks move freight at the rate of 95 ton miles per gallon of diesel fuel. Using these figures, 100 tons of garbage delivered to Bolo Station would require 107.5 gallons of diesel fuel. If garbage were landfilled at an average distance of 45 miles from the point of generation and hauled by truck, this same 100 tons would require 47.4 gallons. This evaluation uses the 230 mile train haul to Bolo Site and 10 miles collection radius from the MRF by truck. The results are skewed in favor of Rail-Cycle in this evaluation as truck hauls to MRF's will doubtless be further and it is 10 miles (by train) from Commerce to San Gabriel (not included in the calculation). Even with these notable omissions, the local landfill option remains the most energy efficient all the way up to a 90 mile average haul. The maximum distance in a landfill's haul radius for 45 mile average hauls is 67 miles. There are numerous sites possible for this option in Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties. This energy criterion should be applied to the NO PROJECT OPTION and be a major determining factor in decision making. (58)

7.3 GROWTH INDUCING EFFECTS:

1. The EIR treats the term "growth inducing" as if it were somehow always a good thing. This is far from the truth in desert regions with limited water supplies, limited housing and limited infrastructure. One of the benefits of the Morongo Basin and the Barstow Areas is the relatively high air quality. This has attracted a population with a high percentage of pollution sensitive individuals. The project would be a major source of air pollution itself and the increase in population in the region associated with the project would bring a secondary pollution factor. It is hard to accurately assess who would have to leave at a particular pollution level. It is impossible to assess how many, who perhaps could not afford to move, would merely be impacted by the project's pollution and injured without any ability to deal with the problem. (59)

2. The conclusion that direct and indirect employment positions would far exceed 260 people is concurred with by this reviewer, however the inference that this is a positive social impact is not accepted. This addition to the Rail-Cycle workforce would no doubt be accompanied

by job losses in other sectors numbering in the thousands.

7.4 ENERGY CONSUMPTION AND CONSERVATION:

1. The Rail-Cycle dump project should be considered as an unnecessarily wasteful project in terms of non-renewable resource consumption and should be denied on these grounds. For the purposes of comparative analysis, which was not performed in the draft EIR, the comparisons made in this critique of the draft under 7.2.(4) are here extended to the 21,000 tons/day ultimate scenario Rail-Cycle poses. The dead-head (empty miles) logged by both methods are not considered. Sufficient data is not provided for fuel consumption on either method:

(60)

RAIL-CYCLE
21,000 tons per day @ 237 ton miles per gallon @ 230 miles traveled per load = 20,379 gallons per day or 611,370 gallons per month.

versus

LOCAL DISPOSAL METHODS
21,000 tons per day @ 95 ton miles per gallon @ 45 miles travelled per load = 9,947 gallons per day or 298,410 gallons per month.

The Rail-Cycle dump proposal is energy inefficient and would result in extra cost to the consumer and extra hydrocarbon emissions in all involved southern California air basins.

(61)

2. The landfill gas recovery and conversion discussed in the Rail-Cycle dump proposal is a technology which could be applied to any dump and are not germane to this EIR other than their necessary inclusion in any project of this nature. Wherever the garbage ultimately is landfilled, it will generate gas.

completed January 31, 1993

Ray Kirkham

Ray Kirkham

DOCUMENT 051
RAY KIRKHAM - FEBRUARY 1, 1993
RESPONSE TO COMMENTS

Response 051-1

1. The data presented in the Draft EIR/EIS is in compliance with the requirements of CEQA and NEPA. For example, Section 15125 of the CEQA Guidelines requires an EIR to "include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and regional perspective." Section 15126 of the CEQA Guidelines explains that an EIR must identify and focus on the possible significant environmental impacts of a proposed project, including anticipated physical changes and probable resulting changes in population distribution and concentration, the human use of land (including commercial and residential development), and other aspects of the resource base.

2. Based on these requirements, the Draft EIR/EIS included the referenced socioeconomic and mineral resource information, as there is the potential for the proposed project to affect these issues.

Response 051-2

1. The discussion of applicable state and federal regulations was included in the Draft EIR/EIS to place the proposed action in its regulatory context.

Response 051-3

1. The data presented in Section 4.7.2 of the Draft EIR/EIS indicated that existing air quality in the vicinity of the Bolo Station site and the County as a whole, is designated as nonattainment for PM_{10} and O_3 under both state and federal standards. This means that the levels of PM_{10} and O_3 exceed air quality standards established by the EPA and CARB.

2. The site for the proposed landfill was chosen irrespective of its existing (high) levels of PM_{10} and O_3. The basis for the assertion that the site is in an area of "nearly pristine air" is not clear, as the area has been designated as nonattainment for PM_{10} and O_3.

Response 051-4

1. Preparation of the Draft EIR/EIS for the Bolo Station Landfill was conducted under the auspices of the joint lead agencies, the County and BLM. They ultimately are responsible for the contents of the document.

Response 051-5

1. This comment provides an overview of the various issues raised by this commenter. Responses to each of these issues are provided in specific responses to this comment and are not duplicated.

Response 051-6

1. Section 1.3 of the Draft EIR/EIS identified issues raised during the scoping process that were to be resolved in the EIR/EIS. Impacts and mitigation measures are identified in Chapter 5.0 of the Draft EIR/EIS.

Responses 051-7

1. This comment expresses opinions regarding SCAQMD's AQMP Measure No. A-D-1, which recommends under certain circumstances, the transportation of biodegradable solid waste to out-of-basin landfills. These opinions do not alter the conclusions or significance of impacts identified in the Draft EIR/EIS. Therefore, no response is necessary to this comment.

Response 051-8

1. It is uncertain as to what specific issue the commenter is referring. However, the regulatory overview included in the Draft EIR/EIS was intended to provide the reader with an overview of the regulatory and legislative framework, which in addition to CEQA and NEPA, would be addressed as part of the proposed action.

Response 051-9

1. CEQA and NEPA require that an EIR/EIS evaluate a reasonable range of alternatives. The alternatives analyzed in the Draft EIR/EIS are feasible, although the various consequences of each alternative may not be considered desirable by various parties.

2. AB 939 requires cities and counties to demonstrate 15 years of solid waste disposal capacity. As discussed in Chapter 2.0 of the Supplement, at present the projected worst-case solid waste disposal capacity shortfall after AB 939-mandated source reduction and recycling requirements have been met is expected to be approximately 16,000 tons per day in metropolitan Los Angeles County alone by 2005. This shortfall in metropolitan Los Angeles is projected to increase to approximately 35,000 tons per day by 2014

(see Table 2.3 of the Supplement). This need, when considered with the 8 years of remaining capacity in San Bernardino County (see Table 2.1 of the Supplement), indicates that two regional landfills on the scale of the proposed action may be needed to enable southern California jurisdictions to fulfill their AB 939 landfill capacity requirements.

Response 051-10

1. Based on comments on the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement included refinement and reevaluation of the impacts and mitigation. The additional analysis included potential emissions outside of the County.

Response 051-11

1. As this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required.

Response 051-12

1. Under California law, each local air pollution control district has primary regulatory responsibility within its boundaries. Adjacent districts that may be impacted by decisions have provided input through the CEQA process. The direct control that the SCAQMD may exert on the Rail•Cycle project is through CEQA review and permitting of material recovery facilities within the SCAQMD.

Response 051-13

1. Bolo Station is in an area that experiences lower velocity winds than various other areas in which landfills are operated (in conformance with the litter control conditions of their permits). For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County, California (data from January through December 1991) is provided in the following table:

PERCENTAGE OF HOURLY OBSERVED WIND SPEEDS

Wind Speed Higher Than:	Bolo Station	Altamont
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

2. The Altamont Landfill is located in an area of relatively constant wind velocity and has attracted wind powered electrical generating facilities. According to WMNA, this landfill is operated in compliance with the conditions of its SWFP including litter control. The Altamont Landfill is permitted to receive up to 11,500 tons of waste per day and typically receives 6,000 tons of waste on a daily basis. The majority of waste is transported to the site by transfer trailers that are tipped at the working face using a portable tipper similar to those proposed at Bolo Station.

3. Litter control measures for the proposed Bolo Station Landfill are discussed in Section 3.3.2.1.3 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected onsite.

4. An important point to note is that by primarily accepting post-recycled waste or waste that has been processed through a MRF, a significant portion of the primary source of litter at most landfills (i.e., paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the litter control measures that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

5. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program that shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high wind velocity. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

Response 051-14

1. As indicated by the comment, 24-hour operation of landfilling activities would require a high throughput exceeding 15,000 tons per day. Litter control measures described in Response 051-13 would be applied during operating hours.

Response 051-15

1. As stated in Section 3.3.2.1.3 of the Draft EIR/EIS, the working face of the landfill would be covered at the end of each working day (i.e., daily) or when a certain amount of waste has been deposited. Once the quantity of waste received at the landfill is sufficient to require 24-hour operations, some portion of the facility would be receiving waste during all hours of the day. As stated in the Draft EIR/EIS, while advancing layers of compacted waste would be covered periodically during the day with daily cover or alternative daily cover, there would not be a need to cover the working face at the end of the day. However, at no time will the working face of the landfill be left exposed and unattended.

Response 051-16

1. It is the purpose of the project description to include sufficient information to provide the basis for an analysis of impacts. According to Section 15124(c) of the CEQA Guidelines, this information is to include:

   > "A general description of the project's technical, economic and environmental characteristics, considering the principal engineering proposals if any (emphasis added) and supporting public service facilities."

   There is not a requirement for final design decisions to be made prior to the environmental review process.

Response 051-17

1. Final design decisions, such as the composition of daily and intermediate cover, would be made in accordance with requirements of the CIWMB and RWQCB.

Response 051-18

1. Subsequent to distribution of the Draft/EIR/EIS, additional analysis regarding geologic and ground water impacts was completed. Chapters 4.0 and 5.0 of the Supplement document this analysis and verified, as did the Draft EIR/EIS, that no significant impacts with regard to geology or ground water are expected from the proposed action.

Response 051-19

1. Section 3.2.4.1 of the Supplement described the proposed alternative final cover. The use of the HDPE membrane in the final cover is a permitting process that has not been completed. The use of the 1-1/2 foot layer of clay as part of final cover represent the "standard" regulatory method.

2. If Rail•Cycle receives the appropriate permits and approvals for the use of an HDPE membrane as part of the final cover, it will replace the use of clay at the site.

Response 051-20

1. Determination of actual construction materials for the final cover is an issue for determination by regulatory authorities. The first application of final cover at the Bolo Station Landfill would not occur until the site has been in operation for five to ten years. Selection of specific materials could be made as individual areas are prepared for capping. Since the evolution of geomembrane liner technology will undoubtedly produce better materials than HDPE in the future, alternative covers could be considered at the time of closure for each cell. The Draft EIR/EIS assessed the impact of the proposed action for the known technology.

Response 051-21

1. As required by CCR Title 14, Rail•Cycle would establish the appropriate funding mechanism to assure that sufficient funds for closure of each cell and for final closure of the landfill are collected from tipping fees. CCR Title 23 also requires the financial assurance of the owner/operator to complete the closure/postclosure operations of the waste management unit. Rail•Cycle would provide at the time of issuance of the respective permits for construction and operation, the necessary assurances for "Reasonable Foreseeable Releases" and closure/postclosure.

Response 051-22

1. The discussion of socioeconomics in Section 4.15 of the Draft EIR/EIS was based on detailed studies by knowledgeable professionals, using accepted sources of information and methods of analysis. It meets CEQA and NEPA requirements for analysis and disclosure of socioeconomic impacts. See also Response 051-23.

Response 051-23

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 051-24

1. An audit of the data presented in Table 4.7.6 of the Draft EIR/EIS against the source document (Jacobs, 1992) disclosed typographical or transcription errors in the following monthly maxima for ozone (O_3) reported in the Draft EIR/EIS:

MONTH	LISTED VALUE (ppm)	CORRECT VALUE (ppm)
April, 1991	0.012	0.102
May, 1991	0.010	0.101
November, 1991	0.230	0.057
December, 1991	0.057	0.043
January, 1992	0.043	0.047
February, 1992	0.047	0.056

Other data in the table are accurate. With the corrections, the patterns followed for monthly peaks and weather were expected. The high PM_{10} values occur on exceptionally windy days when wind-blown dust is known to be high in the area. Ozone patterns reflect typical annual variations observed elsewhere in southern California, showing peaks during the summer months.

2. The corrections to Table 4.7.6 of the Draft EIR/EIS noted by this comment do not alter the findings or conclusions of the EIR/EIS. Corrections have been made as noted in this response and a revised Table 4.7.6 is included in Chapter 1.0 of this Final EIR/EIS and replaces the table in the Draft EIR/EIS.

Response 051-25

1. It is acknowledge that SEDAB is a regulatory defined area. It is appropriate to note that the Bolo Station site is outside the federally designated nonattainment area for ozone, but within the state designated area for ozone nonattainment. It is also appropriate to note that in December 1993 the entire SEDAB was classified as federal and state nonattainment area for PM_{10}.

Responses 051-26

1. Potential noise impacts associated with the proposed action have been clarified as part of the subsequent analysis for the Supplement (Sections 4.5 and 5.5). The analysis included noise impacts along rail corridors. Based on the additional analysis it was determined that noise impacts would not be significant, and therefore do not require mitigation.

Response 051-27

1. See Response 051-26.

Response 051-28

1. See Response 051-26.

Response 051-29

1. Drainage structures associated with the Bolo Station Landfill, including those related to runoff from closed landfill areas, would be designed for a 100-year, 24-hour storm event. Maintenance throughout the active life and postclosure period of the landfill would assure the integrity of drainage structures and other landfill features.

Response 051-30

1. Figure 3.9 of the Draft EIR/EIS showed the final grade and surface water control of the completed landfill. Section 3.3.2.1.2 addressed landfill grading, including criteria for final configuration to minimize erosion. These include 20-foot wide benches at 40-foot vertical intervals to minimize erosion, and a top surface with a minimum slope of 7 percent to provide for surface water runoff without resulting in erosion potential.

2. The final cover for the proposed action was refined subsequent to distribution of the Draft EIR/EIS. See Section 3.2.7 of the Supplement.

Response 051-31

1. See Response 051-29.

Response 051-32

1. The stability of the landfill is in the best interest of Rail•Cycle. Therefore, project design has incorporated standard engineering features to provide a facility that meets the various stability requirements for the region in which it will be located.

Response 051-33

1. See Responses 051-29 and 051-30, which address runoff and erosion.

Response 051-34

1. Chapters 4.0 and 5.0 of the Supplement provided additional hydrogeologic analysis of the site. In the unlikely event of a breach in the liner, leak detection would be early and sensitive with the proposed UZM system. Because ground water movement under the site moves at an extremely slow rate (0.05 feet per day), there would be reasonable time to implement corrective action.

Response 051-35

1. The quotes in this comment, which were taken from the referenced study, *Waste Containment Systems: Construction, Regulation, and Performance*, ASCE Geotechnical Publication No. 267 (1990), are taken out of context. In the same list of conclusions as quotes, the report also states:

   > "The data presented in Tables A-3 and A-6 (summary data tables in the report), suggest that the double-liner systems evaluated in this study have performed well. Leakage rates through the top liners have been low or negligible in most cases and the leakage detection layers appear to be functioning effectively."

2. Based on a exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However the authors clearly make a distinction between liners and liner systems. Further, they state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions."

3. As detailed in Chapter 3.0 of the Supplement, the proposed action includes a double-composite liner system and UZM system to provide 100 percent monitoring coverage under the liner. This monitoring system would provide sufficient time to implement corrective action in the event of a release. The measures included in the EIR/EIS are considered sufficient to mitigate potential ground water quality impacts from proposed action.

Response 051-36

1. See Response 051-35.

Response 051-37

1. See Response 051-35.

Response 051-38

1. See Response 051-23.

Response 051-39

1. In response to this and other comments, the Supplement EIR/EIS defined and analyzed the No Action Alternative on the basis of a 45-mile rather than 100-mile haul of waste by truck to a "new" landfill (see Sections 4.4 and 5.4). It was assumed that the haul is by transfer trailer to an undesignated hypothetical disposal site.

Response 051-40

1. The proposed action has been designed to accommodate the existing and projected need for a portion of the landfill capacity in southern California, a need which was demonstrated by Chapter 2.0 of the Supplement. This need will exist whether or not the proposed action is approved. By providing disposal capacity for a portion of existing and projected growth, the landfill cannot be considered to be growth inducing.

2. While locating the landfill in a rural desert location would eliminate the potential of the environmental impacts at the proposed site, if the landfill were located in an urban setting, the availability of landfill capacity in rural San Bernardino County would not inhibit the

County's potential for growth. Furthermore, the EIR/EIS does not identify any significant, unavoidable impacts of the proposed action which would affect the County's ability to accommodate population or jobs growth.

Response 051-41

1. See Responses 051-39.

Response 051-42

1. The containers that would be used to transport solid waste to the proposed landfill, while sealed to prevent leakage of liquid, are not air tight and do not result in explosive mixtures of gases and excessive pressures. Since April 1991, the Union Pacific Railroad has operated three trains weekly from Seattle, Washington, to the Columbia Ridge Landfill in eastern Oregon, a distance of about 300 miles. Each train carries approximately 3,000 tons of waste in containers similar to those to be used by Rail•Cycle. There have been no fires, explosions, or significant spills from these shipments.

Response 051-43

1. It is acknowledged that beneficial uses of landfill gas exist. Current available options include, but are not limited to:

   - Conversion of the methane portion of landfill gas into compressed methane gas or liquefied methane gas to power onsite equipment, as an alternative to diesel fuel.
   - Used to fuel internal combustion engines, gas turbines, or boilers for the generation of electricity.

   Section 7.4 of the Draft EIR/EIS acknowledged the beneficial uses of landfill gas. The Draft EIR/EIS (Section 3.3.2.6) and the Supplement (Section 3.2.4.4) stated that a energy recovery facility could be designed, permitted and constructed as part of the landfill operation when sufficient quantities of landfill gas make this a viable option.

Response 051-44

1. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to the communities in southern California, after they have met the requirements of AB 939.

2. Alternative waste management practices were eliminated from further detailed analysis in the EIR/EIS because the waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this issue see Section 3.3 of the Supplement.

Response 051-45

1. See Response 051-7.

Response 051-46

1. Source control and recycling are concerns that are associated with AB 939. The requirements of this legislation would not be affected by implementation of the proposed action. Concerns such as the biodegradability of product packaging are marketing/legislative considerations that are outside the scope of this EIR/EIS.

Response 051-47

1. As this comment does not alter the findings or conclusions of the Draft EIR/EIS, no specific response is required.

Response 051-48

1. The alternatives analysis conducted for the proposed action did not identify any sites in Los Angeles, Orange, Riverside, San Bernardino or Kern counties capable of accommodating a rail-haul regional landfill, such as that proposed at Bolo Station, which could meet the region's need for a significant amount of additional long-term landfill capacity. For more information about the alternative site evaluation conducted for the proposed action, see Section 3.3 of the Supplement. For more information on the purpose and need for the proposed action, see Chapter 2.0 of the Supplement.

Response 051-49

1. Mitigation of impacts to below a level of significance has been demonstrated by those experienced in the field of solid waste management. A Mitigation Monitoring and

Compliance Program has been prepared and will be adopted by the County Board of Supervisors. This program would assure that conditions in the various permits are fully complied with.

Response 051-50

1. The characteristics of the waste stream anticipated to be received at Bolo Station are typical of municipal solid waste disposed at existing Class III landfills throughout the state. State and federal regulations for landfill design consider the nature of the waste that will be disposed, and landfills are constructed to provide for maximum stability. The landfill would be located in an arid desert environment where the potential for moisture to enter the waste prism is minimal; in addition, no "lubrication" of the waste stream is proposed. Thus, the potential adverse effects postulated by the commenter would not result in stability issues at the proposed landfill.

Response 051-51

1. The specific characteristics of different materials that would comprise the waste stream, which is deposited at the proposed landfill, are outside the scope of this EIR/EIS. The composition of waste and the effects of decomposition are well known. As stated in Section 5.4 of the Draft EIR/EIS and Section 5.2 of the Supplement, no significant impacts to ground water are expected.

Response 051-52

1. Financial assurance mechanisms are an essential part of securing state and federal approvals for the SWFP and WDRs.

2. CCR Title 23, Chapter 15, Article 5 requires the owner/operator of a landfill to establish financial assurance for a "reasonably foreseeable release" of liquid or gas from the landfill. The financial requirement must be complied with by both public and private operators. The acceptable financial instruments are:
   - U.S. Treasury bills
   - Irrevocable letters of credit
   - Bonds
   - Other stable instruments in which the RWQCB is named as sole recipient

3. CCR Titles 14 and 23 also require the financial assurance of the owner/operator to complete the closure/postclosure operations of the landfill. Rail•Cycle has the financial capability to provide the required assurances. No public liability would be assumed for any unlikely noncompliance activities. Rail•Cycle would provide at the time of issuance of the respective permits for construction and operation, the necessary assurance for "Reasonable Foreseeable Releases" and closure/postclosure.

Response 051-53

1. See Responses 051-35 and 051-52.

Response 051-54

1. As stated in the Draft EIS/EIR, approximately 2,700 acres of the 4,800-acre Bolo Station site would be disturbed for the proposed landfill and of this area, approximately 300 acres could be permanently lost. The rest would be sequentially disturbed and then revegetated over the anticipated 60- to 100-year life of the landfill.

2. Criteria to determine what impacts, if any, to vegetation, wildlife, or land use that would be significant, were set forth in Sections 5.5, 5.6, and 5.14 of the Draft EIS/EIR.

3. As discussed in Section 5.5.1 of the Draft Final EIR/EIS, the results of the impact analysis for the proposed action determined that there would not be significant impacts from implementation of the proposed action.

Response 051-55

1. The mitigation measures included in this Final EIR/EIS would be exercised throughout the life span of the project, and therefore, should not be considered temporary because they would continue to be implemented for at least 60 to 100 years, until no longer necessary.

Response 051-56

1. The commenter is correct in noting the alteration of the landform that would result from implementation of the proposed action.

2. Reemergence of deposited solid waste is not expected. The most common waste to emerge in older landfills is automobile tires which, with implementation of recent legislation, are permitted in small quantities. Therefore, this concern is not an issue for the Bolo Station site.

Response 051-57

1. It is agreed that creation of the proposed landfill would be an irreversible commitment of resources. The effects on topography and the visual

environment would be changed significantly, as described in detail in Section 5.9.1.2 and shown in Figures 5.9.2 and 5.9.3 of the Draft EIR/EIS.

2. Surface drainage patterns would be altered in the immediate vicinity and downgradient of the site. Mitigation measures would be incorporated to reduce potential impacts associated with surface water flows. These measures were described in Section 5.4 of the Draft EIR/EIS.

3. The surface water protection system would be designed in accordance with requirements of the SWRCB and RWQCB. In addition to other criteria, drainage systems would be designed to accommodate a 100-year, 24-hour storm event.

4. As stated in Section 5.2 of the Supplement, the withdrawal of approximately 130-acre feet/year of ground water would be a significant adverse impact.

5. Rail•Cycle would implement measures to protect ground water quality, plus a corrective action plan to pump and treat ground water in the unlikely event that ground water is contaminated. As a result of these measures, it is expected that the quality of ground water will be maintained.

Response 051-58

1. In response to this and other comments, the Supplement EIR/EIS defined and analyzed the No Action Alternative on the basis of a 45-mile rather than 100-mile haul of waste by truck to a "new" landfill (see Sections 4.4 and 5.4). It was assumed that the haul is by transfer trailer to an undesignated hypothetical disposal site.

Response 051-59

1. The discussion of socioeconomic impacts (see Section 5.15 of the Draft EIR/EIS) addressed potential effects to sensitive resources in the Morongo Basin and Barstow. The potential impacts that may result from project-associated increases in population are so noted in Sections 5.15.1 and 7.3 of the Draft EIR/EIS. It is acknowledged that the commenter finds the potential growth in connection with the proposed action a negative impact. However, this does not alter the findings of the EIR/EIS.

Response 051-60

1. As this comment does not alter the findings or conclusions of the Draft EIR/EIS, no specific response is required.

Response 051-61

1. While it is agreed that the technology to recover landfill gas for its energy value can be applied to any landfill, it is included as part of the proposed action and would offset a portion of the energy used to transport waste to the site. Therefore, it is considered to be a valid and important part of the proposed action.

Testimony of Ray Kirkham. 7424 Morningstar Rd 2-S46. 29 Palms. CA 92277. at BLM Hearing at 29 Palms High-school. 2-10-93 relative to Rail-Cycle Bolo Station Project and associated EIR/EIS.

Sheer misrepresentation of South Coast Air Quality Management District (SCAQMD) control measures in paragraph S.7.4 of the EIR/EIS create a rhetorical setting in which false conclusions favoring the project may be drawn. The question of how Southern California will deal with the solid waste situation absent this project is not addressed. ①

The EIR/EIS states that this project is consistent with SCAQMD's Air Quality Management Plan which supports out-of-basin transport of biodegradable solid waste.

Let's see what SCAQMD has to say about this. In a letter to the Desert Sun. Dated March 27. 1992. regarding a similar project planned by others for Eagle Mountain. James M. Lents. the District's Executive Officer says: ②

"AQMD's air quality management plan for clean air by 2010 includes a measure calling for hauling trash by low-polluting ELECTRIC trains. not conventional diesel rail engines."

Later in the same letter. he says of MRC ads touting the Eagle Mountain Project:

"The omission of the word "electric" rail constitutes a serious misrepresentation of AQMD's position on the issue."

This EIR/EIS likewise omits the word "electric" rail from its text. Proponents of this project are grasping for straws in the matter of justifying this project. and those straws. I am certain will break at some time in this permitting process. ② CONT.

Footnote 3 of table S.7.10 in the EIR/EIS says the "NO ACTION" alternative should be based on nine ton capacity trucks transporting waste 100 miles one-way to a hypothetical landfill outside the South Coast Air Basin. Now I ask you. how often would trash be transferred to vehicles smaller in size than the original collection vehicles for long range transfers? I guess this would only be done "hypothetically" to generate favorable comparison figures for your project. ③

So far. in-basin solutions to solid waste treatment and disposal have been totally ignored. though this solution clearly holds the greatest promise. Let's see what SCAQMD's Air Quality Management Plan has to say about this. I quote directly from Measure A-D-1. page D-6. under the heading Proposed Method of Control: ④

"If potential emissions reductions from out-of-basin transport of biodegradable solid waste are estimated to be minor or insignificant. alternative control methods utilizing the best available technology at disposal sites within the basin will be developed."

So there you have it. SCAQMD wants electric trains only. The project uses diesel. In all out-of-basin solid waste transport scenarios, SCAQMD nowhere advocates anything but total exportation of both the trash and the energy generation pollution. If they can't get electric trains, they want hi-tech treatment and control within the basin. ④ CONT.

I personally find SCAQMD's pollution export idea unconscionable. regardless...they will not support this project.

I can only wish that all of the energy and youthful vitality I see in the people employed by Rail-Cycle were directed toward stable. permanent. and morally acceptable solutions.

I invite Weste Management Inc. and ATSF to cease pursuit of this project and recognize at this early point in the process that this project is inappropriate. Both of these firms will no doubt be a part of whatever solution is found. Were all this public relations money for an environmentally unsound project invested in high tech waste treatment development. WMI could develop permanent. steble. mutually beneficial relationships with the communities in which it operates.

DOCUMENT 052
RAY KIRKHAM
RESPONSE TO COMMENTS

Response 052-1

1. The commenter is correct that the statement on page 5.7-18 of the Draft EIR/EIS is inconsistent with the SCAQMD's AQMP Measure No. A-D-1. The AQMP measure not only assumed that transport is by electrified railroad lines, but it also was based on transport of refuse derived fuel, not solid waste, to out-of-basin energy recovery facilities. Therefore, AQMP Measure No. A-D-1 is not relevant to the Rail•Cycle project. This inconsistency was noted in Section 4.4.2 of the Supplement.

Response 052-2

1. See Response 052-1.

Response 052-3

1. Section 5.4.2 of the Supplement presented a refined evaluation of potential air quality impacts associated with the No Action Alternative.

Response 052-4

1. See Response 052-1.

I AM OPPOSED TO THE AMBOY DUMP. I HAVE BEEN AGGRESSIVELY RECYCLING FOR OVER 15 YEARS AND ALTHOUGH THIS DOES TAKE SOME EFFORT - IT CAN BE DONE. BEFORE BRINGING LA'S TRASH TO THE DESERT YOU SHOULD IMPOSE STRICTER RECYCLING PROGRAMS IN L.A. ①

I HAVE SEEN THE FULL PAGE "REPORT CARD" FOR RAIL-CYCLE IN THE PAPER. I FIND IT ODD THAT NOTHING WAS MENTIONED ABOUT THE LARGE FINES AND LEGAL FEES PAID OUT BY RAIL CYCLE. ②

AND HOW MANY OF THE RAIL CYCLE STAFF WILL BUY PROPERTY AND BUILD THEIR HOMES NEAR THE PROJECT?

~~B~~ PERSONAL RECYCLING WILL BE A MUCH BETTER AND LESS ENVIRONMENTALLY DAMAGING WAY TO HANDLE TRASH. ③

I AM OFFENDED BY YOUR OBVIOUS IDEA THAT THE DESERT IS NOTHING BETTER THAN A PLACE FOR THE BIG CITYS TRASH. I KNOW THIS PROJECT IS A DONE DEAL - BUT I OPPOSE IT AND ANYTHING CONNECTED WITH IT.

JUDITH A PRUITT
PO BOX 891
29 PALMS CA 92277
(619) 367-3353

DOCUMENT 053
JUDITH A. PRUITT - NO DATE
RESPONSE TO COMMENTS

Response 053-1

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:

   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 053-2

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 053-3

1. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, would meet that need by helping satisfy the state's requirements, mandated by AB 939, for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise feasibly be reduced at the source, recycled or composted.

054

RECEIVED
BY

Connie Sachs
56664 Piute Trail Yucca Valley, CA 92284-4048

February 7, 1993

Dear Mr. Scott

RE: Rail Cycle Bolo Station Landfill
in Amboy.

I don't want any landfills in the desert. I moved here as a last resort for clean water + air. My life depends on it since. I am exquisitely hypersensitive to chemicals since getting over-loaded in this polluted world.

Once our desert is open to landfills, they will only increase, This will harm our environment and kill our wildlife. Let there be one place in earth for us, the chemically poisoned, to survive.

I don't trust any landfill owners. The past experiences have shown how dangerous landfills become. Once the damage is done it's too late. ①

Please protect us. Don't let the desert become the garbage disposal for So. Cal.

Thank you. Connie Sachs

DOCUMENT 054
CONNIE SACHS
RESPONSE TO COMMENTS

Response 054-1

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of the EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Jean M. LaRose
19021 Panther
Adelanto, Ca 92301

055

February 10, 1993

County of San Bernardino
Planning Department
385 North Arrowhead Ave, 3rd Floor.
San Bernardino, Ca 92415-0182
Attn: Mr. Randy Scott

Dear Mr. Scott,

The Rail Cycle project appears to be
ill-conceived and a very poor idea for ①
our desert. There are not enough plans for
recycling at the source, too many trains, ②
and poor site selection due to the seismic
activity in the area. Hopefully the Planning ③
department will see that any short term
financial gain to county coffers will not
affect the long term real threats to our
fragile environment.

RECEIVED
FEB 1993
BY ______

Sincerely,
Jean M. LaRose

DOCUMENT 055
JEAN M. LA ROSE
RESPONSE TO COMMENTS

Response 055-1

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling, and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled, or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because the waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 055-2

1. The geophysical survey and trenching analysis was completed to verify the presence or absence of active and potential active faults at the proposed site requested by the RWQCB (Jacobs, 1993a). This analysis confirmed the previous findings that indicated there are no Holocene faults at or trending towards the proposed site. For a complete discussion of the results of this verification analysis, see Section 4.1 of the Supplement.

Response 055-3

1. The relationship between short-term uses and long-term productivity of the Bolo Station site was discussed in Section 7.1 of the Draft EIR/EIS. This section examined concerns regarding ground water and air quality, among other issues, and weighed these concerns against the societal need for a long-term waste disposal facility such as the proposed action. County officials will weigh the public benefit against the potential degradation of the environment in their decision to approve or not approve the proposed action.

2.5-39

FEB 1993
RECEIVED
BY

HCO-2- BX326Z
81371-BARDEN-RD,W.V.
29 PALMS,CA.92277

MR. Scott

Sir! we do not appreciate
taking Garbage from anyone,
Into our Desert Area's
nature did not Intend; for this
to be a Garbage Dump!
we moved away from the City
for the "Clean Fresh Air" ect.
why Burden us with the
Garbage, from Los Angles!
Rats! love Garbage, & we do ①
not, want to have to fight,
Rats because of this Proposed
Garbage Dump Sir! →

②

have you visited or lived
here in our desert?
It is a Joy to have Fresh
Air, to Breathe, every Day
If the Trucks bring up the
Garbage, Our Air will be
Polluted. Then where do we!
who have "Broncial Asthma"
go to Breathe Fresh Air?
we know (Rail-cycle Bolo) will not ②
live up to its promise's These-
Companies never do. why!
I feel we who live here have
more at Stake than money!
Sincerely
Mrs Vera Ciborowski

DOCUMENT 056
VERA CIBOROWSKI
RESPONSE TO COMMENTS

Response 056-1

1. Modern landfills are operated and maintained to assure that vectors/nuisance species such as rats and insects do not result in impacts, either at the landfill or in the surrounding areas. The primary method for controlling vectors/nuisance species at the proposed landfill were discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations would be employed (i.e., compaction of waste at the working face, periodic application of cover material during the day, maintaining a small working face, and an active litter control program) that are expected to be effective in limiting the attractiveness of the site to vectors, insects and birds.

Response 056-2

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

057

FEB 1993
RECEIVED
BY:

Sir:-

This is a letter en protest of the rail cycle project. My husband and myself live in the Victorville area and do not want this for the following reasons.

1.) As many of us have learned from last years earthquake, many areas are ~~on~~ unstable. The Rail Cycle proposal is on unstable area. Even with the proposed shell layer, the potential for a tear in that shell & the water contamination is too high a risk. ①

2.) If Rail Cycle is "enviromentally sound" idea, why are they using Obsolete equipment (trains) using fossil fuel. There are alternative means of energy. This also concerns us. A company who wishes to be an answer to the problem, eventually adds to it by air contamination. A train more than one mile long is uncomfortable but 20 is entolerable to the enviroment. ②

These are just two of the many concerns that we and others share. We ask that you reconsider this project.

Sincerely,
John & May Lohe

John & May Lohe
13610 Cypress Ave.
Victorville, CA 92392

DOCUMENT 057
JOHN AND MAY LOHE
RESPONSE TO COMMENTS

Response 057-1

1. The geophysical survey and trenching analysis was conducted to verify the presence or absence of active and potential active faults at the proposed site as requested by the RWQCB (Jacobs, 1993a). This analysis confirmed the previous findings and conclusions that there are no Holocene faults at or trending towards the proposed site. For a complete discussion of the results of this verification analysis, see Chapters 4.0 and 5.0 of the Supplement.

Response 057-2

1. Based on comments on the Draft EIR/EIS, additional analysis regarding potential air quality impacts were completed for the proposed action. Sections 4.4 and 5.4 of the Supplement included refinement and reevaluation of the impacts and mitigation. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMD's Air Quality Attainment Plan related to emission reductions for ozone precursors.

2. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

058

FEB 1993
RECEIVED
BY

18527 Damon Dr.
Hesperia, CA 92345
February 10, 1993

County of San Bernardino
Planning Department
385 N. Arrowhead Ave. 3rd Floor
San Bernardino, CA 92415-0182

Attention: Mr. Randy Scott

Dear Mr. Scott:

I realize that counties need to dispose of trash. However, Rail Cycle should have a very up-to-date recycling program. It should be recycling Not just the minimum the law allows, but it should be a leader in recycling Technology. ①

Also, the trains used to transport the trash should be "clean" trains & not add to the air pollution of the areas through which the train travels. ②

Sincerely,

Ellen B. Kindsvater

DOCUMENT 058
ELLEN B. KINDSVATER
RESPONSE TO COMMENTS

Response 058-1

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by the years 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling, and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled, or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 058-2

1. Subsequent to circulation of the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement described refinement and reevaluation of the impacts and mitigation. The Supplement also included information regarding rail electrification (Section 5.4.3.2). Although this analysis concluded that rail electrification solely to mitigate Rail•Cycle's air quality impacts was not economically feasible, region-wide efforts are underway to implement measures to significantly reduce locomotive emissions.

2. A recent study was conducted under contract to CARB to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:
   - Retarding injection timing and other engine modifications.
   - Selective catalytic reduction (SCR).
   - Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
   - LNG combined with SCR.
   - Electrification.

   Based on the proposed regulatory framework, allowable locomotive emissions per net ton mile transported would be reduced by 80 percent between 1996 and 2003. Santa Fe Railroad is actively participating in the efforts to develop strategies to reduce locomotive emissions.

059

9898 Maple Ave.
Hesperia, CA 92345
10 February 1993

County of San Bernardino
Planning Department
385 N. Arrowhead Ave.
Third Floor
San Bernardino, CA

FEB 1993
RECEIVED
BY

Dear Friend

I am writing on my concerns about the Rail Cycle Project being considered.

The area planned for this use is sensitive, subject to movement, and can cause extensive pollution of the groundwater. ①

The amount of recycling planned is insufficient to make up for increased air pollution from the trains and degradation of our desert. ②

Los Angeles and Orange County residents should handle their wastes using carbside recycling and composting. They should not be encouraged to generate waste products with this project. ③

Sincerely

Rebecca M. Turner

DOCUMENT 059
REBECCA M. TURNER
RESPONSE TO COMMENTS

Response 059-1

1. The geophysical survey and trenching analysis to verify the presence or absence of active and potential active faults at the proposed site, concluded that there are no Holocene faults at or trending towards the proposed site (Jacobs, 1993a). For a complete discussion of the results of this verification analysis, see Chapters 4.0 and 5.0 of the Supplement.

2. Please refer to Section 4.2 of the Supplement for supplemental information and analysis regarding the potential for ground water contamination due to implementation of the proposed project.

Response 059-2

1. AB 939 requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:

   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling, and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled, or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 059-3

1. See Response 059-2, above. For more information on Los Angeles County's efforts to manage its waste stream, including recycling efforts, see Chapter 2.0 of the Supplement.

County of San Bernardino , Planning Dept.
385 N. Arrowhead Third Floor
San Bernardino , Ca. 92415-0182
ATTENTION : Mr. Randy Scott

RECEIVED
FEB 1993
BY

Dear Mr. Scott ;

Seven years ago my Husband and I moved from the Los Angeles area . We like most other people , came to the desert to get away from the city and its problems . The thought that San Bernardino County would consider the Bolo Station dump is unbelievable . Los Angeles and Orange county have had decades to prevent and solve the present trash problem, the future is now upon them and they want to ship their **TRASH** to our Beautiful desert.

2.5-47

We do not have pollution in our air , we can see the sunsets and stars without the smog to obstruct our views . **WE DO NOT WANT TO LOOK AT A THREE MILE WIDE , 420 FOOT HIGH TRASH STOCKPILE.**

There are hundreds of acres of rich farmland next to the proposed dump site , it is used for organic farming of grapes and citrus crops . The dump will attract unwanted vermin and scavengers to the nearby crops and the crops will be destroyed . When this happens the farm workers will be out of jobs and they will join the ranks of the unemployed . ①

It upsets me to think that our elected officials would sell out the very people who elected them to office . ②

We will continue to prosper without Rail-Cycle , lets worry about our own trash future . **DO NOT** let Los Angeles and Orange County dump their trash in our backyard to spoil our beautiful desert .

My Husband and I urge you to **DENY** Rail-Cycle Bolo Station in its entirety , to include all proposed area alternate sites

Thank you,
Lynnette M. Shmakoff
Lynnette M. Shmakoff
7626 Bullion Mtn. Rd.
Twentynine Palms, Ca. 92277
VOTER

DOCUMENT 060
LYNNETTE M. SHMAKOFF
RESPONSE TO COMMENTS

Response 060-1

1. Modern landfills are operated and maintained to assure that vectors/nuisance species such as rats and insects do not result in impacts, either at the landfill or in the surrounding areas. The primary method for controlling vectors/nuisance species at the proposed landfill were discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations would be employed (i.e., compaction of waste at the working face, periodic application of cover material during the day, maintaining a small working face, and an active litter control program) that are expected to be effective in limiting the attractiveness of the site to rats, insects and birds.

Response 060-2

1. The EIR/EIS for the proposed Bolo Station Landfill is the first step in the process being conducted by the County and BLM to determine whether to approve or deny the proposed action. No decisions have been made by the County Planning Commission, County Board of Supervisors, or BLM regarding the proposed action.

2. The information in the EIR/EIS will be evaluated by the County Planning Commission during public hearings that will be conducted once the EIR/EIS is complete. The Planning Commission will then make a formal recommendation to the County Board of Supervisors regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

3. The County Board of Supervisors will consider the information in the EIR/EIS and the recommendation by the Planning Commission during public hearings regarding the proposed landfill. The County Board of Supervisors will then vote regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

4. The public is encouraged to make its concerns known regarding the proposed landfill to the County Planning Commission and Board of Supervisors.

4
FEB 1993
RECEIVED
BY

061

February 7, 1993

County of San Bernardino
Environmental Planning Team
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0182

Attention: Mr. Randy Scott
Senior Planner-Environmental Team

Re: Draft Environmental Impact Report
Bolo Station Landfill
Ref Pg. 4.15-5 Sect. 4.15.2-Housing

Dear Mr. Scott:

In the above mentioned report, Newberry Springs appears to be overlooked entirely. We own a beautiful Recreational Vehicle Park (travel trailers) in this community, which is closer to the planned facility than Barstow by about thirty miles and most certainly closer than Twenty-Nine Palms. ①

We would welcome an inspection team to look us over and include us in your housing impact report. We are located six miles north of highway 66 via Newberry Road on Twin Lakes Drive. I do feel your personnel will appreciate our beautiful small community and the peace, quiet, and cleanliness of our Park.

Sincerely,

Louise Browy

Orville and Louise Browy
Owners
TWIN LAKES R.V. PARK
46200 Twin Lakes Drive
Newberry Springs, CA 92365
619-257-3377

DOCUMENT 061
ORVILLE AND LOUISE BROWY
RESPONSE TO COMMENTS

Response 061-1

1. A source of housing relatively close to the Bolo Station site would be appreciated by many individuals during both the construction and operations phases of the proposed landfill. For purposes of this EIR/EIS, it has been assumed that the majority of construction/operations personnel may choose to live in the larger communities such as Barstow and the Morongo Basin. However, it also is expected that others, who prefer a more rural atmosphere, may choose to live closer to the site, such as in Newberry Springs or similar communities.

3/24/93

County of San Bernardino, Planning Dept.
385 N. Arrowhead Ave. 3rd Floor
San Bernardino, Ca. 92415-0182
Attn: Mr. Randy Scott

RECEIVED
FEB 1993
BY

I am writing in regard to the Rail Cycle-Bolo Station Landfill to which, as a 22 year resident of the desert, I am opposed.

My concerns are with the effect the landfill would have on the air, water, salt wells, agricultural projects, Indian ruins, with it's artifacts and to visual character of the area.

① Air quality is bound to be affected negatively by chemicals used for dust suppression, wind erosion and binding agents for covering stockpiles. The E.I.R.-E.I.S states that there are significant, unavoidable adverse impacts regarding certain emissions. Will they have an accumulative effect?

② I'm concerned with a percentage of hazardous waste that will get mixed in with the non-hazardous waste which can cause problems even though special temporary storage is used. How careful will the MRFs be about separating hazardous from non-hazardous waste?

③ I am concerned that air quality in Twentynine Palms, (only 50 miles away as the crow flies), will be affected as well as

③ CONT. Palm Springs, Needles and Barstow, not to mention Amboy and Cadiz. Why contaminate the clean air and make it as bad as that in the populated counties whose trash would be sent to the beautiful desert?

④ I am concerned about water quality in regard to Aquifer overdraft and soil contamination caused by leakage of liners. Surely the material cannot last forever.

⑤ The mitigation measures are supposed to correct problems such as excessive amount of water flow but measures such as restoration of channels, sump, etc. would be done after damage has occurred.

⑥ The salt wells, particularly the three wells closest to the landfill are bound to be affected not only by water contamination but air borne dust and other particulates. Once again Rail Cycle states they will make any changes necessary to correct any problems but there may be problems that are impossible for them to correct once they are detected.

⑦ The agricultural project (grapes + citrus) would surely be affected adversely. What a shame - to think that this promising project with it's fertile soil, and good water could end up with a dump site only 1 mile away.

062

I am concerned that the operators of Rail Cycle will not comply with State and federal regulations at all times. I am concerned with the past record of Waste Management of North America Inc concerning their compliance with regulations. ⑧

I realize desert land is much less expensive than vacant areas in the counties wishing to dump in the desert, therefore desert land is acquired for dump sites. Vacant areas near populated areas continue to be sold for construction of more and more housing developments.

Why can't each county be responsible for their own waste? They should get serious about recycling to cut down on the amount of waste that goes into their landfills.

In closing, I realize that waste has become a tremendous problem in Southern California. We must develop the recycling process so that we do not have to destroy the clean, quiet, open spaces of our deserts. ⑨

Thank you for your time.

Sincerely
Phyllis Crawford
7620 Utah Trail
Twentynine Palms, Ca. 92277

DOCUMENT 062
PHYLLIS CRAWFORD
RESPONSE TO COMMENTS

Response 062-1

1. Although no significant impacts are expected from the use of dust suppressants, as discussed in Section 5.4 of the Supplement, the proposed action will have a significant impact on air quality in the SEDAB after mitigation.

2. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). The project, therefore, would not be consistent with those parts of the MDAQMD's Air Quality Attainment Plan related to emission reductions for ozone precursors.

3. The estimate of combined NO_X and ROG project emissions at full development in the year 2010 is 1.7 tons per day, representing an increase in the current planning inventory baseline of 0.6 percent. To the extent that these emissions are not offset or mitigated in attainment plans adopted by the MDAQMD, these emissions could delay attainment of ozone standards.

4. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response 062-2

1. As discussed in Section 3.2.1 of the Draft EIR/EIS, MRFs would inspect incoming wastes for hazardous and nonpermitted wastes, and separate any found, prior to shipment to the proposed landfill. Rail•Cycle has stated that the proposed landfill would only accept waste from MRFs that demonstrate they have an approved Hazardous Waste Screening/Exclusion Program that is acceptable to the SBCDEHS. A RDSI has been submitted to the LEA for review as part of the permitting process for the SWFP. The RDSI sets forth provisions for the screening and handling of any suspected hazardous waste that may enter the landfill.

Response 062-3

1. See Response 062-1.

Response 062-4

1. Section 5.2.1.2.1 of the Supplement provided additional information regarding the potential overdraft of Bristol Basin. Based on this supplemental analysis the proposed action is not expected to adversely affect other users in the area.

2. As detailed in Chapter 3.0 of the Supplement, the proposed action includes a double-composite liner and UZM systems to provide 100 percent monitoring coverage under the liner. This monitoring system would provide sufficient time to implement corrective action in the event of a release. The measures included in the EIR/EIS are considered sufficient to mitigate potential ground water quality impacts from the proposed action.

Response 062-5

1. Measures are included as part of the proposed action to mitigate potential stormwater run-on and runoff impacts, before affecting the environment. Drainage structures at the proposed site, including those related to runoff from close landfill areas, would be designed to handle the 100-year, 24-hour storm event without appreciable erosion. Section 3.3.2.1.2 of the Draft EIR/EIS and Section S.2 of the Supplement described the controls which would be implemented to control stormwater runoff within the landfill limits for active working areas, completed cells, and areas to be developed. Stormwater run-on would be diverted from the active cells by temporary diversion ditches that would be constructed around the perimeter of each individual cell or working area. The water would be diverted from the active cell and collected in a temporary run-on retention pond. Stormwater runoff from within the active working area would also be collected and diverted to an unlined temporary runoff retention pond.

2. Maintenance throughout the active life and postclosure period would assure the integrity of drainage structures and other landfill features.

Response 062-6

1. Sections 4.3 and 5.3 of the Supplement provided refined analysis of the potential effects of consolidation and ground water pumping on both the quality and quantity on Cargill's brine well production. Conclusions reached based on the subsequent studies relating to brine production concerns include the following:

   - No significant change to the quality of the brine fluid produced by Cargill will occur due to the consolidation of clay materials within Cargill's pumping drawdown cone.
   - The vertical spread of any migration of gas and leachate from the waste body would be controlled by the speed at which it could disperse and diffuse within the aquifer. Given the slow measured rates of ground water movement at the site, mitigative actions to remediate any detected release could be undertaken long before significant downgradient movement could occur.
   - Onsite ground water pumping for the landfill uses at the Section 9 location would not interfere with the Cargill Salt Wells. The relocation of this well, as currently proposed to be located in Section 33, will further reduce the potential for impacts to the brine resource.

Response 062-7

1. A report was prepared addressing the potential for disease vectors to be attracted to agricultural crops in the vicinity of the proposed landfill. The report, *Agricultural Impact Report - The Potential Impact on Local Agriculture From the Proposed Rail•Cycle Bolo Station Landfill,* was prepared by Edwin Barnes, Ph.D., and summarizes experiences reported by researchers at Cal Poly (Barnes, 1993). The report addressed the potential for insect/nuisance vectors to be introduced into agricultural zones and referenced the following agricultural operations conducted in proximity to currently operating landfills:

   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile of the 2,800 ton per day County of Los Angeles Spadra Landfill.
   - Privately owned and operated orchards situated in proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

2. The following discussion highlights the findings of the above report:

   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported health or safety impacts.
   - Negative effects, attributable to landfill operations on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Unpaved internal roads within the Cal Poly campus farm are responsible for more fugitive dust-related impacts on agricultural operations than fugitive dust emitted from the Spadra Landfill.
   - Citrus trees located three-tenths of a mile from the Highgrove Landfill do not exhibit more dust or dirt than trees one mile away and in the middle of the orchards.
   - The Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

3. The following mitigation measures were recommended in the report to minimize potential agricultural impacts:

   - Implementation of fugitive dust control measures, including watering, use of dust abatement products, construction of berms, speed limit controls, and curtailing operations during occasional high winds. This mitigation measure is already included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Installation of a pole and wire system or some other effective alternative for control of birds. This mitigation measure is included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

4. Based on the above findings and mitigation measures, the marketability of CLC produce is not expected to be affected by development and operation of the proposed landfill.

Response 062-8

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 062-9

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
    - Source reduction.
    - Recycling and composting.
    - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling, and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled, or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

063

Feb. 19,1993

San Bernardino County Planning Commission;

I am writing due to my concerns over the Rail-Cycle proposal. I began hiking and rock climbing in Joshua Tree and the surrounding area over twenty years ago. There is a special place in my heart for it's raw natural beauty. I have always held a deep respect for nature and I believe it is everyone's job to maintain it in as pristine a condition as is possible.

I therefore request that you instead consider revitalizing your own Waste Management Department with state-of-the-art treatment processes. ①

Thank you for your consideration on this important issue.

Sincerely,
Helene Schpak
Helen Schpak

H Schpak
1332 N. Sierra Bonita Av. #4
Los Angeles, CA 90046-4118

cc: Supervisor Turoci
Supervisor Mikels
Supervisor Riordan
Supervisor Walker
Supervisor Eaves

2.5-57

FEB 1993
RECEIVED
BY

063

CONCERNED CITIZENS' PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California area residents opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents of Southern California do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Matthew McGrath Print name MATTHEW McGRATH
Address 1018 N. HAYWORTH AV. #7 WeHo CA 90046
Resident X Property owner_____ Voter X
2. Signature Raymond Reece Print name RAYMOND A. REECE
Address 5337½ VILLAGE GREEN LA CA 90016
Resident_____ Property owner ✓ Voter ✓
3. Signature Mary Lucey Print name MARY LUCEY
Address 939 Superba Ave Venice CA 90291
Resident_____ Property owner X Voter X
4. Signature Elizabeth Prince Print name ELIZABETH PRINCE
Address 8669 COLGATE AVE LA CA 90048
Resident_____ Property owner_____ Voter ✓
5. Signature D C Coplan Print name D C COPLAN
Address 414 N Poinsettia Pl LA
Resident_____ Property owner_____ Voter ✓
6. Signature__________ Print name__________
Address__________
Resident_____ Property owner_____ Voter_____

CONCERNED CITIZENS' PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California area residents opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents of Southern California do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.5-58

1. Signature Kathleen Sorensen Print name Kathleen Sorensen
Address 16716 Oxton Ave Gardena CA 90247
Resident X Property owner ____ Voter X
2. Signature Judy Jimenez Print name JUDY SISNEROS
Address 952 MALTMAN AVE, #109, LOS ANGELES 90026
Resident ____ Property owner ____ Voter X
3. Signature H. Schpak Print name H. Schpak
Address 1332 N. Sierra Bonita Av. L.A. Co. 90046
Resident ____ Property owner ____ Voter X
4. Signature Cynthia Crogan Print name Cynthia Crogan
Address 802 N. Hilldale Ave. #8 W. Hollywood, Ca. 90069
Resident X Property owner ____ Voter X
5. Signature Scott A. Burritt Print name Scott A. BURRITT
Address 1120 N. LAUREL AVE # 12 W. H. CA 90046
Resident X Property owner ____ Voter X
6. Signature Lauren Nackman Print name Lauren Nackman
Address 4541 Richard Dr.
Resident ✓ Property owner ____ Voter ✓

CONCERNED CITIZENS' PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California area residents opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents of Southern California do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Print name MICHAEL YARROFF
Address 7971 WARING Ave L.A. CA. 90046
Resident ✓ Property owner ____ Voter ✓
2. Signature Wendy Blank Print name Wendy Blank
Address 1906 Warfield Ave #4 Redondo Beach CA 90278
Resident ____ Property owner ____ Voter ✓
3. Signature David Lacaillade Print name DAVID LACAILLADE
Address 1112 N. OLIVE DR. #5 W. HOLLYWOOD, CA 90069
Resident ✓ Property owner ____ Voter ____
4. Signature Jeff Schuerholz Print name JEFF SCHUERHOLZ
Address 162 N. La Brea LA 90036 CALIF.
Resident ✓ Property owner ____ Voter ✓
5. Signature Print name ANTONY BALCERA
Address [illegible] [illegible] Terrace #103 LA CA [illegible]
Resident ✓ Property owner ____ Voter ✓
6. Signature J T Anderson Print name J T Anderson
Address 999 N. Doheny Dr., LA, CA 90069
Resident X Property owner X Voter X

063

CONCERNED CITIZENS' PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California area residents opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents of Southern California do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Zane L Krein Print name Zane KREIN
   Address 1280 N. Laurel #22 West Hollywood, CA 90046
   Resident ____ Property owner ____ Voter ✓
2. Signature Wayne Lineburg Print name WAYNE LINEBURG
   Address 329 WINCHESTER GLENDALE CA 91201
   Resident ____ Property owner ____ Voter ____
3. Signature Steve Peckman Print name STEVEN PECKMAN
   Address 3314 ROWENA AVE #4 LA CA 90027
   Resident ____ Property owner ____ Voter ✓
4. Signature M Watton Print name MARCY WATTON
   Address 1007 N Madison LA 90027
   Resident X Property owner ____ Voter X
5. Signature Paul Langlotz Print name PAUL LANGLOTZ
   Address 1276 N. Harvard Blvd LA. Ca. 90029
   Resident ✓ Property owner ____ Voter ✓
6. Signature Michael Morrissey Print name Michael Morrissey
   Address 3425 Bellevue Ave #2 L.A. Ca. 90026
   Resident ✓ Property owner ____ Voter ✓

2.5-59

DOCUMENT 063
HELENE SCHPAK
RESPONSE TO COMMENTS

Response 063-1

1. AB 939 requires cities and counties to demonstrate 15 years of solid waste disposal capacity. As discussed in Chapter 2.0 of the Supplement, at present the projected solid waste disposal capacity shortfall after AB 939-mandated source reduction and recycling requirements have been met is expected to be approximately 16,000 tons per day in metropolitan Los Angeles County alone by 2005. This shortfall in metropolitan Los Angeles County is projected to increase to approximately 35,000 tons per day by 2014 (Chapter 2.0 of the Supplement, Table 2.3). This need, when considered with the 8 years of remaining capacity in San Bernardino County (Chapter 2.0 of the Supplement, Table 2.1), indicates that at least two regional landfills on the scale of the proposed action will be needed to enable southern California jurisdictions to fulfill their AB 939 landfill capacity requirements.

2. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to southern California communities after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action which was developed in response to a request by the Los Angeles County Sanitation Districts for long-term landfill capacity, would meet that need by helping to satisfy the state's requirements, mandated by AB 939 for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise feasibly be reduced at the source, recycled or composted.

3. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action.

064

FEB 1993
RECEIVED
BY

Dear San Bernardino Planning Commission:

Many people, including my Husband and I, have moved to the desert, some at great sacrifice of good paying jobs, etc., to enjoy the beauty of desert life, the pristine air, the clear skies, the beautiful sunsets, stars and wildlife. To escape the many problems, and the air and noise pollution of big cities. To raise our children in a "HARD TO FIND", decent, and clean enviornment. In addition to others who have moved here due to health problems.

The very thought that San Bernardino County would even consider the RAIL-CYCLE BOLO LANDFILL (possibly the LARGEST waste site in the WORLD) is not only shocking, but, appalling to us.

We are absolutely infuriated to think that our elected officials would actually sell out the very people who elected them to office. ①

We are strongly opposed to the prospect of having our desert areas polluted by billions of gallons of diesel fuel, noise, and a 420 FT. HIGH BY THREE MILE WIDE stockpile of garbage and debris from various cities and counties in the Southern California area.

To add insult to injury, just ONE (1) mile east of this proposed dump site is Cadiz. A rich farmland consisting of approximately 26,000 acres (25-26 sections) and another proposed 9,000 acres, if approved. There are 1,140 acres which are now being used to produce organically grown citrus, red and green grapes. This year they have been asked to grow raisins, as well. This farming project is unique, and the only one of its kind, certified by several agencies within the State of California. The Cadiz Land Company has been at that location for approximately 8-10 years. First, in its developmental stages since the early 1980's. It's earliest planting of grapes began in 1986. This commercial grown produce is ,also, shipped all over the world, and to many Los Angeles based chain stores, such as, Stater Brothers, Vons, Ralphs, Luckys, etc. It would be criminal to put this farming industry, and its workers, out of business in lieu of a pile of rubbish, air pollution, and more UNEMPLOYMENT! ②

We firmly believe in foresight, NOT hindsight! And, in the event that this proposed landfill were passed, the damages to the environment would be irreparable, and highly expensive to those here who would, undoubtedly, have to pick up the tab! You cannot, buy clean air, water or good health. Once its gone....its GONE!!!

My Husband and I urge you to search your consciences, putting people and the quality of life and environment above money, and to DENY the proposed Rail-Cycle Bolo Landfill in its entirety, to include ALL other proposed area alternate sites.

THANK YOU,

Charles W. & Donna L. Fox

Charles W. & Donna L. Fox/Voters
6989 North Star Avenue
Twentynine Palms, CA. 92277-3723

DOCUMENT 064
CHARLES W. AND DONNA L. FOX
RESPONSE TO COMMENTS

Response 064-1

1. The EIR/EIS for the proposed Bolo Station Landfill is the first step in the process being conducted by the County and BLM to determine whether to approve or deny the proposed action. No decisions have been made by the County Planning Commission or the County Board of Supervisors, or BLM regarding the proposed action.

2. The information in the EIR/EIS will be evaluated by the County Planning Commission during public hearings that will be conducted once the EIR/EIS is complete. The Planning Commission will then make a recommendation to the County Board of Supervisors regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

3. The County Board of Supervisors will consider the information in the EIR/EIS and the recommendation by the County Planning Commission during public hearings regarding the proposed landfill. The Board of Supervisors will then vote regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

4. The public is encouraged to make its concerns known regarding the proposed landfill to the County Planning Commission and Board of Supervisors.

Response 064-2

1. The environmental effects of the proposed action as they relate to neighboring agricultural lands are analyzed in the Draft EIR/EIS in Sections 5.4, 5.7, and 5.14. The Draft EIR/EIS does not identify significant impacts to the neighboring agricultural operations. A buffer of one mile exists between the land holdings of CLC and the proposed action. When the current agricultural operations and the proposed expansion of CLC are considered, the distance from the proposed landfill is approximately five to six miles.

2. There is no factual evidence provided by the comment, except the opinion of the commenter, that the proposed action would affect the public's perception of the crops grown by CLC or their ability to continue its operation.

3. A report was prepared addressing the potential for disease vectors to be attracted to agricultural crops in the vicinity of the proposed landfill. The report, *Agricultural Impact Report - The Potential Impact on Local Agriculture From the Proposed Rail•Cycle Bolo Station Landfill,* was prepared by Edwin Barnes, Ph.D., and summarizes experiences reported by researchers at Cal Poly (Barnes, 1993). The report addressed the potential for insect/nuisance vectors to be introduced into agricultural zones and referenced the following agricultural operations conducted in proximity to currently operating landfills:
   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile of the 2,800 ton per day County of Los Angeles Spadra Landfill.
   - Privately owned and operated orchards situated in proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

4. The following discussion highlights the findings of the above report:
   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported health or safety impacts.
   - Negative effects, attributable to landfill operations on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Unpaved internal roads within the Cal Poly campus farm are responsible for more fugitive dust-related impacts on agricultural operations than fugitive dust emitted from the Spadra Landfill.
   - Citrus trees located three-tenths of a mile from the Highgrove Landfill do not exhibit more dust or dirt than trees one mile away and in the middle of the orchards.
   - The Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

5. The following mitigation measures were recommended in the report to minimize potential agricultural impacts:

   - Implementation of fugitive dust control measures, including watering, use of dust abatement products, construction of berms, speed limit controls, and curtailing operations during occasional high winds. This mitigation measure is already included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Installation of a pole and wire system or some other effective alternative for control of birds. This mitigation measure is included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

6. Based on the above findings and mitigation measures, the marketability of CLC produce is not expected to be affected by development and operation of the proposed landfill.

MAR 1993
RECEIVED
BY

Dear Larry Walker, Fourth District Supervisor:

Many people, including my Husband and [illegible] have moved to the desert, some at great sacrifice of good paying [illegible]., to enjoy the beauty of desert life, the pristine air, the clear skies, the beautiful sunsets, stars and wildlife. To escape the many problems, and the air and noise pollution of big cities. To raise our children in a "HARD TO FIND", decent, and clean enviornment. In addition to others who have moved here due to health problems.

The very thought that San Bernardino County would even consider the RAIL-CYCLE BOLO LANDFILL (possibly the LARGEST waste site in the WORLD) is not only shocking, but, appalling to us.

We are absolutely infuriated to think that our elected officials would actually sell out the very people who elected them to office.

We are strongly opposed to the prospect of having our desert areas polluted by billions of gallons of diesel fuel, noise, and a 420 FT. HIGH BY THREE MILE WIDE stockpile of garbage and debris from various cities and counties in the Southern California area.

To add insult to injury, just ONE (1) mile east of this proposed dump site is Cadiz. A rich farmland consisting of approximately 26,000 acres (25-26 sections) and another proposed 9,000 acres, if approved. There are 1,140 acres which are now being used to produce organically grown citrus, red and green grapes. This year they have been asked to grow raisins, as well. This farming project is unique, and the only one of its kind, certified by several agencies within the State of California. The Cadiz Land Company has been at that location for approximately 8-10 years. First, in its developmental stages since the early 1980's. It's earliest planting of grapes began in 1986. This commercial grown produce is ,also, shipped all over the world, and to many Los Angeles based chain stores, such as, Stater Brothers, Vons, Ralphs, Luckys, etc. It would be criminal to put this farming industry, and its workers, out of business in lieu of a pile of rubbish, air pollution, and more UNEMPLOYMENT!

We firmly believe in foresight, NOT hindsight! And, in the event that this proposed landfill were passed, the damages to the environment would be irreparable, and highly expensive to those here who would, undoubtedly, have to pick up the tab! You cannot, buy clean air, water or good health. Once its gone....its GONE!!!

My Husband and I urge you to search your consciences, putting people and the quality of life and environment above money, and to DENY the proposed Rail-Cycle Bolo Landfill in its entirety, to include ALL other proposed area alternate sites.

FEB 26 1993

THANK YOU,

Charles W. & Donna L. Fox

Charles W. & Donna L. Fox/Voters
6989 North Star Avenue
Twentynine Palms, CA. 92277-3723

DOCUMENT 065
CHARLES W. AND DONNA L. FOX
RESPONSE TO COMMENTS

Response 065-1

1. This is the same letter that is designated as Document 064 in this Final EIR/EIS. The only difference between the two letters is to whom the letter is addressed. Document 064 was addressed to the San Bernardino Planning Commission and Document 065 was address to Larry Walker, Fourth District Supervisor. Documents 064 and 065 are both included in the EIR/EIS for purposes of completeness of the administrative record.

2. For responses to comments raised in Document 065, see the Response 064-1.

066

Feb. 22, 1993

Re: Draft EIR, Rail•Cycle—Bolo Station Landfill

This proposal discusses a plan to transport by rail up to 21, 000 tons of waste per day generated by cities in San Bernadino county to a 2,000-acre dumpsite on land in the Mojave Desert currently managed by the Bureau of Land Management. This site would be used to collect "landfill" for 60 to 100 years.

There are three reasons why I oppose this project:

1. Garbage is ugly.
2. Garbage is smelly.
3. The project puts an additional strain on the already overdrafted water resources for the area.

A garbage dump creates an eyesore that permanently and irreversibly changes the desert landscape. The people in the cities of San Bernadino don't want this eyesore in their county, so why should it be tolerated in the Mojave? As the Draft Statement acknowledges, the county has established land-use guidelines that do not accommodate this unsightly blight. These guidelines should not be ignored, especially in undeveloped rural areas. ①

The Draft Statement also acknowledges that the project cannot completely mitigate the "NO_x and ROG emissions", a euphemism for stench. Anyone who has spent time in the desert knows that high winds are a daily occurrence. These winds would carry this unpleasant smell to the town of Amboy and to all corners of the open space, way beyond the boundaries of the landfill site. ②

The Draft Statement acknowledges that some 100 additional worker s would bring their families, and would need housing, schools, police protection, and water. The current population already has overdrafted the water supply. Where would the extra water for the next hundred years or more come from? This report makes no attempt to discover who would take responsibility for assuring sufficient water for even the next thirty years. In California, a state that has had a history of droughts, and especially in the desert in California, conscientious planners should concern themselves with adequate water supplies for any project that places an additional burden on precious water resources. ③

066

Feb. 22, 1993

This report is apparently based on an assumption that cities in San Bernadino will continue to grow and produce more than 21,000 tons of waste a day. ④ Has anyone attempted to stem this waste production by other means, such as massive composting projects, by educating the populace in waste reduction, or providing incentives to industrial waste generators to reduce the amount of waste generated? ⑤ Certainly, because the railroad line already exists, this plan appears to be the easiest solution for moving waste away from the people who generate it. Then they don't have to concern themselves with it, and the Rail•Cycle people get to make lots of revenue. But the easiest solution does not always bring about the best result in the long-term . If this project were approved, our descendants would be left with a very large pile of garbage in what used to be beautiful open space, something that we are already running short of.

Sincerely,

Karen Felker

Karen Felker
263 Chenery
San Francisco, CA 94131

DOCUMENT 066
KAREN FELKER
RESPONSE TO COMMENTS

Response 066-1

1. An irreversible change would be made in the topography of the proposed Bolo Station site if the landfill is approved. Permit conditions and the mitigation measures in this EIR/EIS would minimize the visual impact of the proposed project to the maximum extent practicable. Standard operating procedures for litter control, elements of the project description (for example, size of the working face, incremental landfill cell development and closure, and others), and mitigation measures for air quality, vegetation, and visual resources are designed to facilitate blending of the proposed landfill with the natural environment.

2. County land use guidelines allow development of actions such as the proposed Bolo Station Landfill with the approval of a CUP and amendment of the County General Plan. The EIR/EIS process is designed to provide environmental analyses that facilitate informed decision-making by responsible County personnel for actions such as the proposed Bolo Station Landfill. The EIR/EIS acknowledges the decrease of County open space lands in the Resource Conservation category should the proposed action be approved. This decrease must be examined relative to the public need for long-term waste disposal and the regulatory requirement for cities and counties to identify long-term disposal options in specific CoIWMPs. For additional information on public need and regulatory requirements, see Chapter 2.0 of the Supplement.

Response 066-2

1. Section 5.8.1 of the Draft EIR/EIS discussed potential odor emissions from the landfill, and concludes that offsite odor impacts would not be significant. Furthermore, high wind conditions in the desert are typically accompanied by unstable atmospheric conditions which rapidly disperse air contaminants after their release to the atmosphere. These are typically considered the most favorable conditions to minimize downwind odor impacts. Odor impacts are most persistent at low wind speeds (i.e., wind speeds of less than 10 miles per hour) during stable atmospheric conditions. The analyses discussed in Section 5.8.1 of the Draft EIR/EIS assumed that worst-case dispersion conditions prevailed (i.e., low wind speed during stable atmospheric conditions), and concluded that offsite odor impacts would not be significant.

Response 066-3

1. The Draft EIR/EIS noted that the demand for water in the Morongo Basin sometimes exceeds supply. It also points out that local planners are in the process of further developing local aquifers and purchasing water from other areas. It is acknowledged that demand over and above existing requirements may be significant. The mechanism for accommodating an increase in demand exists via distribution of tipping fees and other taxes associated with the proposed action. Such agreements would occur between the affected local communities, the County, and Rail•Cycle.

Response 066-4

1. This comment misinterpreted the Draft EIR/EIS regarding the origin of the waste that is expected to be disposed of at the proposed landfill. San Bernardino County only generates about 6,000 tons of solid waste per day.

2. As discussed in Chapter 2.0 of the Supplement, the proposed landfill would provide the cities and counties in southern California an option to meet their solid waste disposal requirements. Initially, the proposed landfill is expected to receive waste from metropolitan Los Angeles County. After the initial startup period, the proposed landfill may receive waste from other counties including Orange, Riverside, San Bernardino, and San Diego.

Response 066-5

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.

- Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

6. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this subject see Section 3.3 of the Supplement.

067

MAR 02 REC'D

David E. Sabol
5393 Smoketree Ave.
Twentynine Palms, CA 92277
(619) 367-2491

March 1, 1993

San Bernardino County Planning Dept.
385 N. Arrowhead 3rd Floor
San Bernardino, CA 92415
Attn: Randy Scott

Reference: Draft EIR/EIS Rail Cycle Bolo Station Landfill, State Clearinghouse No. 91092020; comments and procedural objections for inclusion in the administrative record.

Dear Sirs:

Two thousand square miles of the Mojave Desert drains into Bristol Lake. Within the networks of numerous mountain ranges defining the greater drainage area, this salt-encrusted playa covers an area of seventy-five square miles. On the northeastern edge of this playa, an accumulation of dune sand has yielded reliable and important evidence of man's earliest occupation of the California Desert. (Lerch, 1991) The recorded cultural resources reflect Native American use of the area during prehistory.

A three mile long and one mile wide dune sand deposit is the natural repository of prehistoric artifacts. Approximately 75 to 80 percent of the archaeological property is situated on the site of the proposed Bolo Station mega-garbage dump. (50 Years of Archaeology in the California Desert : An Archaeological Overview of Joshua Tree National Monument, King, Thomas F. DD #979.4). ① The area was nominated as an Area of Critical Environmental Concern and identified as having secular and sacred value to Native Americans. The proposal for using an identified cultural resource described in the Draft EIR/EIS (Table 4.10.1, Site/Isolate SBr-6682) for the construction of roads and landfill cover cannot be mitigated. ②

As the project will destroy the cultural resource (archaeological site), and as the project will result in the change of ownership of the resource, the EIR/EIS must enumerate the impact as adverse. Pursuant 36 CFR 800.0 et seq., the EIR/EIS has failed to meet the following requirements: ③

The only "interested party" consulted pursuant to identifying historic properties was the San Bernardino County Museum, not the more general, and required Section 106 process required by law. This process is the responsibility of the agency (BLM) and is to be implemented early in the planning phases of a project per section 800.3 (c). There is no indication of any intent to establish a schedule for a section 106 Process at all. ④

As the resource has a history in a
from the early 1930's to the present, w
California Desert Plan (1980), this res
specifically identifiable as both a cul
American resource and hence subjec
preservation whenever a project or any
decrease its value.

As the EIR/EIS process is sp
responsibility of assessing environment
with documenting that the proper hist
were followed. No such documentatio
EIR/EIS. A letter from the County Mus
artifacts on the site and that they we
however the last finding from them in
study of the resource had been done.

The Section 106 Process is specif
resource is to be destroyed (used as la
the BLM for private use. The BLM is
sites, contacting Native American
negotiating mitigations if possible. T
preservation of these sites. Dispute
Secretary of the Interior.

The above conditions do not suppor
impact" as alleged by the Draft EIR/EIS
support usage of archaeological sites a

Yours Truly,

David Eugene Sabol

David Eugene Sabol

DOCUMENT 067
DAVID E. SABOL
RESPONSE TO COMMENTS

Response 067-1

1. A portion of site SBr-6682 occurs in the proposed project area. This cultural resource comprises sparsely distributed remains of temporary camping and other activities conducted during the prehistoric period. Cultural material contained in the site was mapped, surface materials were collected, and a subsurface testing program was conducted. The data and information from the site has been preserved.

2. Pursuant to the Section 106 Process required by the National Historic Preservation Act of 1966 and regulated by the 36 CFR 800 Procedures (Protection of Historic Properties), BLM and SHPO concurred that the cultural resource is not eligible for NRHP listing, and, therefore, does not represent a significant cultural resource (see Appendix C of the Supplement).

Response 067-2

1. The project area and vicinity does not lie within an Area of Critical Environmental Concern (ACEC), nor was it nominated for ACEC status in the CDCA Plan (BLM, 1980). Reference to the site area as having secular and sacred value to Native Americans is not made in the CDCA Plan. BLM conducted a review of the Native American Sacred Lands Inventory with negative results for the proposed project area (BLM, 1992).

Response 067-3

1. Of the 22 sites and 8 isolates in the proposed project area, the single cultural resource determined eligible for NRHP listing (and therefore significant) is site SBr-2910H, the original route of the National Old Trails Road. Adaptive reuse of this roadway for landfill traffic was determined to not have an effect on the heritage values that make the resource significant. The remaining cultural resources in the proposed project area were determined not to be eligible for NRHP listing. As such, they require no further management or mitigation considerations. Only significant resources can be affected by a proposed action, and BLM and SHPO in consultation, concur that significant cultural resources would not be affected by the proposed action (see Appendix C of the Supplement).

Response 067-4

1. The San Bernardino County Museum is the regional archaeological information center and clearinghouse for cultural resource information in San Bernardino County. It is one of a series of information centers throughout California that serve similar functions as repositories for cultural resource records, reports, and other data. The information center was contacted to retrieve archived data concerning the proposed project area and vicinity, which was an activity distinct from "interested party" consultation in support of the Section 106 Process. BLM conducted consultations pursuant to Section 106, and the process has been completed.

Response 067-5

1. As stated in Response 067-2, the proposed Bolo Station Landfill project area was not referenced in the CDCA Plan and was not identified as a Native American resource (also see Section 4.14 of the Draft EIR/EIS). The cultural resources within the proposed project area were reviewed for their potential to receive adverse effects as a result of the proposed action. Generally, this is a two-step process: first, to determine resource significance since only significant resources can be affected; and second, to determine if significant resources would be affected adversely. In completion of the Section 106 Process, it was determined that one cultural resource site is a significant resource (site SBr-2910H), and that this site would not be adversely affected by the proposed action. These determinations were made by BLM and SHPO in fulfillment of the Section 106 Process (see Appendix C of the Supplement).

Response 067-6

1. The proper historic preservation procedures to be followed during preparation of the EIR/EIS document are defined by the 36 CFR Part 800 regulations, "Protection of Historic Properties." These implement the Section 106 Process to assure adequate consideration and treatment of cultural resources on federal lands or those resources involved in federally funded, licensed, or permitted actions. Refer to Response 067-1 for information on completion of the Section 106 Process for the proposed action. Note that BLM

is charged with the protection of significant cultural resources, not all cultural resources. Appendix C of the Supplement contained the record of BLM and SHPO consultation that completed the Section 106 Process.

Response 067-7

1. The Section 106 Process, as implemented by the 36 CFR Part 800 regulations, was followed throughout the cultural resource research and consultation activities conducted for the proposed Bolo Station Landfill. The process was completed after filing of the Draft EIR/EIS, and completion of the documents for Appendix C to the Supplement for the Section 106 Process (with a statement of SHPO consultation and concurrence in the determination that the proposed action will not affect historic properties). BLM was the lead agency for initiating and completing the Section 106 Process in consultation with SHPO.

Response 067-8

1. A finding of no significant impact is warranted for the cultural resources at the proposed Bolo Station site. Of the 22 sites and 8 isolated finds in the proposed project area, only one resource was determined to be significant by BLM and SHPO consultation. Impacts to nonsignificant resources are not considered significant and do not require mitigation. Impacts to the one resource (site SBr-2910H) determined to be significant are not expected to occur as a result of the proposed action, due to the adaptive reuse of the resource in character with its original use (roadway). SHPO concurred with BLM that adverse effects to the resource would not occur as a result of this adaptive reuse.

068

MAR 1993
RECEIVED
BY________

Dear Scott 3-1-93

(Re) My call to you about Amboy Dump.

My mother Helen Steppe and myself Both oppose the Dump. 2 letter address to your office, to (Ms Browne) claim that if the Dump leak nothing can be Done, and that the Direction of the water under the Dump is South or toward Wonder Valley, but you claim that all Evidence show the water Does not leave that Basin. We also talk about Dumping (something) in the 2 Dump test well to see if it show up in the well of Wonder Valley, you claim that if this is Done it should be Done After the Dump start up, I believe it should be Done prior to start up we oppose the Dump. If the Dump leak and the water Does supply any one's wells those well are lost. The test should be Done Before

①

Your Truly
Bernard Steppe Jr
PO Box 621
29 Palm CA 92277

DOCUMENT 068
BERNARD STEPPE, JR.
RESPONSE TO COMMENTS

Response 068-1

1. Refined hydrogeologic analysis has been conducted subsequent to distribution of the Draft EIR/EIS to assess water flow characteristics beneath the proposed site. The data and conclusions from these studies were documented in Sections 4.2 and 5.2 of the Supplement.

MAR 1993
RECEIVED
BY

February 26, 1993

County of San Bernardino, Planning Department
385 No. Arrowhead, Third Floor
San Bernardino, CA 92415-0182
ATTN: Mr. Randy Scott

Dear Mr. Scott:

I am a resident of Twentynine Palms and am writing both to address the EIR on the proposed Bolo Station Landfill and to express general concerns on the subject to the County of San Bernardino. I will try to address some of these issues relatively coherently. I am not an expert in many areas, so I am leaving the statistics and proofs to others who I am sure will also be responding to you. However, I am familiar with the arguments, the statistics and the proofs, and am convinced of the validity of my positions on these issues.

In short, I find the Bolo Station Landfill to be a misbegotten project based on the asking of the wrong questions. Some of the answers to the *correct* questions would include: sane and managed development, product packaging reduction, overall waste reduction, recycling, landfill reclamation, high rate aerobic composting, and responsible disposal/handling of waste in the geographic area of generation. The Bolo Station Landfill proposal and the EIR never get to these answers because *they* assume the question is, where's the most out of sight/out of mind place we can haul our garbage by diesel rail. And what do you know, suddenly, they have a mega-dump at Bolo or Cadiz Valley looking like a valid idea. It is the wrong idea. It is the wrong direction. And they are asking the wrong questions. This is not acceptable. ①

EXHIBIT A: LA'S TRASH IS LA'S TRASH

To begin with, the bottom line of it all is, L.A.'s trash is L.A.'s trash. It's not ours. I was born and reared in the San Gabriel Valley. My family and many friends still live there. I love them. I do not love their trash. They're going to have to find another way of dealing with it, a little closer to home. Sorry, but to me getting paid to swallow somebody else's garbage is a particularly unsavory form of prostitution. It's the last kind *I* would ever engage in. ②

Frankly, the coastal counties are in an ongoing state of denial. They have been in one about water for decades. Now they're in one about trash. I think co-dependent support of this habit would be a terrible thing to do to them; it's time for a little tough-love. Because if they get one more "out" like this one, they'll just want another.

As an example of this whimsical world of denial, the South Coast Air Quality Management District Management Plan Measure No. A-D-1, cited in the EIR, calls for transporting biodegradable solid waste out of their basin to reduce their air emission problems. Oh, really? Yes, and I think San Bernardino County should mandate all of us out here to take our garbage and put it on the steps of Los Angeles City Hall, so its fumes won't bother *our* air. Get real! For anybody to accept this as a valid regulation is absurd. For any arguments based on this being a reasonable or acceptable idea to show up in the EIR calls that whole document into question. ③

However, Rail-Cycle has taken this fun-and-crazy game of playing with reality one better. Using the same measure mentioned above, Rail-Cycle has a history of indicating in its media campaigns that the South Coast Air Quality Management District has endorsed waste-by-rail as a way to reduce emissions and smog in the region, and has inferred thereby that the proposed landfill has the support of the SCAQMD. In fact, the SCAQMD has endorsed the hauling of trash by low-polluting ELECTRIC trains, not diesel engines. There is a very big difference. Like an entire project's worth of difference.

The EIR does not help matters any by not paying intelligent attention to the air quality effects in the coastal counties. Do you realize how much diesel fuel Rail-Cycle is going to use hauling the trash all the way the heck out here? I mean, who dreamed this idea up? The oil companies? The arguments in the EIR presume that the only alternative to *rail* haul to distant desert landfills is *truck* haul to distant landfills, and concludes thereby that air emissions would be less with Rail-Cycle. Specious reasoning, could we say? Again, asking the wrong questions. The fact is, trucks would not *have* to haul trash 100 miles to a landfill. This is a way-out assumption. The distances would be much shorter and would contribute less air pollution than the EIR suggests. Try doing the computations in a realistic way, and see what you get. ④

Adequate examination of alternatives by the EIR must include consideration of techniques and locations that are *not* waste-by-rail. Again, the assumption that waste-by-rail is a forgone conclusion in southern California pervades the EIR. This is a dangerous and improper assumption. If the EIR and the powers that be in Los Angeles were to look at alternatives, they would find that there are modern, high-tech ways of dealing with the trash closer to home that would be more efficient, less costly and less polluting than training it out here. They are not looking at those alternatives, and they are using specious figures and arguments, because Rail-Cycle is trying to ram this project through. I truly worry about the influence Rail-Cycle has, to have shut out sane consideration of the situation so thoroughly. ⑤

Waste Management Inc. has a deservedly bad reputation. Why are the EIR, the coastal counties, and San Bernardino County having anything to do with this outfit? Their record *must* be examined and cited, for the EIR to have any credibility. And when WMI's history and current operations are clearly seen and understood by the public, people are going to demand to know what strings this group was pulling, and why nobody was blowing the whistle. Our elected officials have to stop this now, before it progresses any further. If they wait until later on, they're going to come up smelling pretty bad. ⑥

⑥ CONT. WMI has a documented history of anti-trust violations. Why would the counties want to put themselves in the costly and unnecessary position of being eventually victimized by a price-controlling monopoly? One wonders. When this mega-system is the only game in town, with everybody's waste future invested in it, we'll be paying whatever they ask. WMI's history must be cited in the EIR. Additionally, a future of Southern California waste management under the control of Waste Management, Inc. should be modeled in the EIR. What will the effect be on other waste collection and disposal businesses in the coastal counties? It is frightening to envision this immense metropolitan area being completely dependent on this one company's rail line out to the desert. This is the wrong idea. This is the wrong direction. The EIR must examine this question. The potential socioeconomic impact would be substantial on other waste management businesses and on the populous at large.

⑦ And what if, frankly, WMI screws up, and contaminates or otherwise renders the project inoperable some time in the future when all of Southern California is dependent on it? This is not only possible, the odds judging from their past make it likely. At that time, there would no longer be facilities and systems in place in the coastal counties to deal with the waste. Possible alternatives for more local and more modern waste management would never have been explored. Rail-Cycle would hold all the cards. Rail-Cycle is the wrong idea, and the wrong direction.

⑧ Waste Management Inc. has a documented history of environmental violations. Again, why are the counties considering dealing with such an outfit? Their environmental record of mismanagement and contaminated closures must be examined in the EIR. What are the limits on liability and remediation from these people? Can they pull out whenever they want, pay the nominal fines and leave San Bernardino County or the State of California holding the bag? Do you realize what kind of potential costs we're talking about?

To take these kinds of risks with a good-faith company would be one thing. To do so with WMI is nuts, and the motives of any government official advocating doing so may be legitimately questioned. There's one thing I think can be just about guaranteed: there are going to be clean-up costs associated with this poorly-designed project. Who are going to be the lucky ones to pay these costs? WMI is way too slick to get caught holding the bag; they've had a lot of experience with this kind of evasion. If the citizens of San Bernardino end up paying these costs one day, woe unto those who brought it upon them.

EXHIBIT B: GEE, BUT IT WON'T WORK

⑨ Waste engineers will tell you that a garbage pile this big without a superstructure is going to settle. It's inevitable. As it begins to collapse, the "cap" on it is going to break apart. Contamination of the water, air and surrounding land will follow. Look it up. Talk to some independent engineers. This much-ballyhooed liner has no figures to support it lasting for as long as it's going to have to, because it can't. The EIR cannot provide absolutely watertight proof of this liner's permanent impermeability, including under conditions of erosion and exposure as the landfill itself inevitably falls apart, which it will. ⑨ CONT. I am not basing my drinking water, or asking anyone else out here to base their's, on the dependibility of this liner. ⑩ I also do not believe there will never be rainstorms strong enough to flow over or erode right through whatever berms or barriers these people put up. Have you folks ever been in the desert in a rainstorm? ⑪ And this leachate system has clear technical lacks, and at best is only as good as the people who run it. Water is scarce out here. It's not enough for WMI or the county to say, "We're sorry. Here's a hundred dollars." Ruined water out here is fatal. Sorry, but WMI cannot be trusted with this kind of responsibility. Look at their record.

The EIR admits that the air quality impacts would be unacceptable. Enough said, you'd think. Unfortunately, I've seen people swallow unacceptable things before when there was a little green flashed around. Let us repeat: it is unacceptable, and will remain unacceptable. There is no way to mitigate this. The beautiful air in the desert is one of the few universally-agreed upon selling points it's got. Monkey with it at your peril.

⑫ I'm afraid this line about keeping the landfill covered is completely unconvincing. It's not going to be covered a good deal of the time, and eventually will be open continuously. How is that going to contain odors and/or dust? Most importantly, how is that going to keep trash from blowing out? Again, have you folks ever been in the desert? Especially out in an area like Bolo. Even where I live, an area less exposed, I've seen the wind come up in a matter of minutes, lift up and blow away stuff you wouldn't believe. My friends, there's going to be trash blowing through that whole part of the Mojave with this landfill. Period. There's no way to mitigate it, unless the entire operation were indoors. A six-foot wind fence ain't gonna do it. And that amount of loose trash fouling our desert is 100% unacceptable.

⑬ Regarding ravens, the EIR is particularly unclear and unconvincing. This bit about doing a study of the ravens is nonsense. Everybody knows about the ravens - they follow trash. Rail-Cycle doesn't have to do a study on it; that's purely a stalling measure. There are no effective methods to deter the ravens when you have a landfill that is open part of the time, and when you have trash from the landfill blowing all over the desert. Ravens will come, and ravens prey on young tortoises. That's the facts, ma'am. Rail-Cycle has no real effective plan on what to do about the ravens, and they won't get one. They are trying to ignore the whole topic with this "study" sham. Give me a break. Don't accept this kind of superficial voodoo pest management.

I would also like to point out that if the makers of the EIR were paying attention they would notice that the people interested in protecting the desert tortoise are positively rabid, and they are currently pulling out every stop to force the federal government through the courts into an aggressive protection program. If Bolo ravens are found to be devastating tortoises in nearby crucial habitat, you could be looking at a major shut-down and a major loss of investment. I would also point out that any accompanying development and roads that might affect the tortoise might not have a very sweet future, either.

Additionally, in light of that, I would like to emphasize that though Bolo itself is not prime tortoise habitat, areas of the Cadiz Valley are definitely to be considered as such. I do not find the EIR at all thorough on this point. We need specific survey designations from Fish and Wildlife and the BLM, not "could-be-designated's." I guarantee anything less will come back to haunt you. ⑭

In sum, a raven study and baseline monitoring do not equal prevention of the problem. I have zero faith in some vague after-the-fact mitigation measures developed in consultation with the BLM and USFWS. They don't have any mitigation measures either. Waste will blow out of the landfill. Nylon lines are not going to do the job. What is more, with the overall increase in activity and development, the tortoise roadkill rate is going to jump way up, no matter how slowly people drive on the access roads. The EIR is entirely remiss in concluding no unavoidable adverse impact in this matter. ⑮

Indeed, the mitigation measures overall regarding wildlife and paleontological, visual and cultural resources address for the most part only the site, access roads and employees. It ignores the overall increase in activity, development and population not contained on the site or its access roads. These are an increase that, not being directly on the site or part of the project, will not effectively be subject to the mitigation measures, no matter who has what good intentions. With human beings comes very high risk of damage and destruction, or at the very least overuse. This project brings in human beings in what for the desert is large numbers, and frankly, a lot of these will be coming in because of a dump job, not because they love the desert. They will treat the desert accordingly. ⑯

I live in the desert for the quiet, the peace, and the open spaces. These are manna to me. They are a lot of what the Mojave is about. Amendment of the California Desert Conservation Area Plan, going from L (limited use) to I (intensive use) would be an insupportable act, and truly forces one to ask, "What next?" Besides the big ugly bump of the landfill, Rail-Cycle will bring with it development, roads, vehicles, lights, noise, people, etc., etc., etc. None of that belongs out there. It will lay waste to that entire area, to everything that it means. Talk about changing the character of the site! The tragedy that would be is inexpressible. ⑰

Besides the Bolo area, the project would have undesirable effects on my part of the desert, as well. There would be increased growth and traffic in the Morongo Basin. I don't choose to live in the Coachella Valley or some other stupidly unplanned and overdeveloped areas of the desert; I like it here, vast and rural and wild and sparse. Again, I LIVE HERE FOR THE QUIET, THE PEACE, AND THE OPEN SPACES. I love and honor the other parts of the desert for the same reason.

There's not much open space left in this country, folks. To waste another part of it with this unnecessary project is tragically criminal. And there is no way to mitigate this loss. When it's gone, honey, it's gone. There is no excuse for allowing this to happen.

EXHIBIT C: THE DESERT IS NOT A DUMP

For San Bernardino County to begin treating its desert as a dump, is to open the door and invite the world to do the same. Each dumping project will further degrade the assets of the desert, until quite soon the only thing it will be good for is trash and waste. Do I have to explain that that's unconscionable? If your regard for our desert is so poor, you're in the wrong job. As is universally admitted, this project in no way complies with the Open Space Element (scenic resources) of the County General Plan. Take that as a hint that in times of greater sobriety and wisdom the County knew this great breadth of desert was worth preserving as it is. ⑱

The reason ultimately that the coastal counties want the trash away instead of in landfills in their own jurisdictions, is so that they can cash in on developing their own land. Keep it nice, build houses, etc., and make money off it. How nice for them. How cruddy for us. Those tipping fees are going to be all we get, friends, when we have a nice, secure, 100-year reputation as Trash Alley. Watch tourism and sane development fade away to mere memories. This is obviously true.

As one local example of WMI's lack of credibility and suspect intentions, let me present the following. On the one hand, Rail-Cycle boasts it will help the Morongo Basin meet its mandated goal of reduction of wastes going to our local landfills, as required by AB 939. On the other hand, it also claims that we will not have to worry about garbage trucks driving to and from the Bolo landfill, as all transport will be by rail. Are they trying to tell us that they're going to get our trash to Bolo without using trucks? How? Build a railroad out here? Sure. No, they're going to truck it out via Hwy. 62 and Amboy Road. Either that, or they're going to truck it all the way down to San Bernardino and put it on a train to come all the way back up to Amboy. Right. Who are they kidding? Either Rail-Cycle is not going to help the Morongo Basin meet it's landfill-reduction mandate, or it's going to truck garbage through here. Period. These people will say anything. They cannot be trusted. They do not care a damn about recycling, the environment, San Bernardino County, you, or me. They care about Profit in their Pockets. ⑲

So, you will be trading positive, sane development in our county for more careless, easy-buck development in the coastal counties. You have to wonder what conceivable advantage there is for us in that deal. We get the trash, they get all the perks. Are we the low-class, backward, not-too-bright cousin, to grin stupidly at this offer and say, "Gosh, thanks!"? It is insulting beyond measure that the SCAQMD believes it can simply mandate sending its undesirable polluting substances out of its jurisdiction and into another, and humiliating beyond measure that my county is considering accepting it.

The future costs to this county are only too plain to see, both from degradation of our resources and from clean-up and liability costs. The tipping fees are a pitifully silly amount when measured against those costs. Please. Be statesmen. Show concern and intelligent leadership for the citizens you represent. You know that it is your duty. We know that it is your duty.

FINALLY

As a comment on this process itself, the public scoping and hearing process was inadequate. As an example, I work nights; clearly I could not attend any of the hearings. There were no weekend hearings. They also were not adequately publicized; many people were outraged to find out about the hearings after the fact. The obligation of this process is not to reach just those folks who already know about it and are keeping an eagle-eye out. The process must be required to do true "outreach" to all persons who might be affected by a project of this scope, so that they might be informed of the project, its possible consequences, and their possible recourses. ⑳ Additionally, in the EIR itself, I found in the "Comments on Notice of Preparation" many documents that raised issues I found either nowhere addressed or else only cursorily dismissed. This is not acceptable. If these issues are not addressed in the EIR, where will they be addressed? ㉑

We must start asking the right questions, and we can start in the EIR. What are the alternatives for dealing with the coastal counties' trash? There are new technologies that should be researched and considered. Another old-fashioned dump way out in the desert does not cut it as "the only answer" anymore. Wrong idea, wrong direction, wrong question. A serious examination of alternatives must be in the EIR. ㉒

In summary, the only reasonable and acceptable alternative in the case of the proposed Bolo Station landfill and proposed alternative sites is the No Action alternative. The unavoidable significant impacts alone make proceeding with this project beyond rationalizing, and many of the mitigation measures proposed are what I would classify as "wistfully wishful". That is not good enough. If the mitigation measures don't work, will we find the consequences to be supportable and acceptable? Because between the unreliability and unpredictability of many of these mitigation measures, and the proven unreliability and bad faith of Waste Management Inc., these consequences are going to occur.

I expect all of these issues to be examined and addressed in detail by the EIR/EIS, and by the San Bernardino County Board of Supervisors. I also expect this letter of concern to be included in the administrative record.

Thanks for your work and attention.

Sincerely,

Christine Carraher
7628 Robin Road
Twentynine Palms, CA 92277
(619) 361-0505

cc: Supervisor Marsha Turoci
Supervisor Jon Mikels
Supervisor Barbara Riordan
Supervisor Larry Walker
Supervisor Jerry Eaves

DOCUMENT 069
CHRISTINE CARRAHER
RESPONSE TO COMMENTS

Response 069-1

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling, and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled, or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 069-2

1. As discussed in Response 069-1, above, and Chapter 2.0 of the Supplement, even with compliance with AB 939's source reduction and recycling requirements, Los Angeles County will still require substantial additional landfill capacity. For more information on solid waste management practices in Los Angeles County, see Chapter 2.0 of the Supplement.

Response 069-3

1. The commenter is correct that the statement on page 5.7-18 of the Draft EIR/EIS is inconsistent with the SCAQMD's AQMP Measure No. A-D-1. The AQMP measure not only assumed that transport is by electrified railroad lines, but it also was based on transport of refuse derived fuel, not solid waste, to out of basin energy recovery facilities. Therefore, AQMP Measure No. A-D-1 is not relevant to the Rail•Cycle project. This inconsistency was noted in Section 4.4.2 of the Supplement.

Response 069-4

1. Energy consumption and conservation with regard to the proposed action was discussed in Chapter 3.0 and Section 7.4 of the Draft EIR/EIS.

2. Subsequent to the circulation of the Draft EIR/EIS, additional air quality analysis was completed. Sections 4.4 and 5.4 of the Supplement specifically included refined analysis regarding the air quality impacts of the No Action Alternative. It was concluded that emissions would decrease as a result of the 3,000 tons per day scenario (1994) resulting in a benefit to the air quality in SEDAB. Under the 21,000 tons per day scenario, criteria pollutants would increase and is considered a significant impact.

Response 069-5

1. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated

from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this issue, see Section 3.3 of the Draft EIR/EIS.

Response 069-6

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 069-7

1. The range of this comment is outside the scope of the EIR/EIS. Further, the basis for the commenter's assertions that all of southern California would depend on the proposed landfill, and that the project, if implemented, would subsequently become inoperable and would preclude the development of other landfills or disposal alternatives, is not clear.

Response 069-8

1. See Response 069-6.

Response 069-9

1. Supplemental information regarding potential settlement at the proposed site was provided in Section 5.1.1.2 of the Supplement. Based on refined soil analysis that was conducted subsequent to the distribution of the Draft EIR/EIS, the soils underlying the site may be classified as "over-consolidated" instead of "normal to slightly over-consolidated" as determined by the earlier study (Jacobs, 1993b).

2. Based on refined soils characterization, maximum potential settlement at the site, including the effects of landfilling and ground water pumping, is estimated to be approximately 4.3 feet. This compares to the previously predicted maximum of up to 14 feet. The landfill design has been conservatively based on the maximum of 15.6 feet of settlement which is a refined estimate based on "normal to slightly over-consolidated" soils.

3. The base grades for the landfill have been designed to account for the maximum settlement (due to both ground water pumping and landfilling), the 9-foot capillary zone, and the maximum potential rise in the water table (due both to a 100-year, 24-hour storm and the cessation of Cargill Salt Well pumping). The design will allow for the "worst case" cumulative effect of all these factors.

4. Sections 5.2 and 5.3 of the Supplement also provided additional information regarding the potential of water contamination in the event of a leakage in the liner.

5. The proposed action would not depend on any individual system to prevent water degradation. As shown in Figure 3.2 of the Supplement, the proposed double-composite liner includes duplicate leachate collection systems. Further, the leachate collection system is designed such that leachate would be contained in its general area of production as shown in Figure 3.12 of the Draft EIR/EIS. The proposed action includes a monitoring system that would provide sufficient time to implement corrective action in the event of a release.

Response 069-10

1. As described in Section 3.2.4.3 of the Supplement, various stormwater run-on and runoff control features at the site would be designed, constructed and maintained for the 100-year, 24-hour storm, rather than the 25-year, 24-hour storm as stated in the Draft EIR/EIS.

Response 069-11

1. See Response 069-09.

Response 069-12

1. The commenter has misinterpreted operational procedures. The working face of the landfill, not the entire facility, would be open for the period of time that it is actively receiving waste. Once such activity ceases, it would be covered by a minimum of 6 inches of daily or alternate cover, as required by Subtitle D and CCR Title 14. This is an effective measure that reduces litter, odor and attractiveness to vectors.

2. Litter control measures for the proposed Bolo Station site are discussed in Section 3.3.2.1.4 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) is expected to trap any litter that may be blown from the working face. There also would be a full-time litter control team to assure that litter is collected onsite.

3. An important point to note is that by primarily accepting post-recycled waste or waste that has been processed through a MRF, a significant portion of the primary source of litter at most landfills (i.e., paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the planned litter control measures is expected to control onsite and offsite litter.

4. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program that shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high wind velocity. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

Response 069-13

1. The Draft EIR/EIS (Section 5.6.1) acknowledged that a concern has been raised regarding the proposed landfill attracting ravens to the site and potentially resulting in an increase in the raven population in the region. The Draft EIR/EIS also acknowledged that such an increase could result in additional impacts on the desert tortoise, as ravens are known to prey on tortoise.

2. The control of ravens and other birds species at the proposed landfill was discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations that would be employed (i.e., compaction of waste at the working face, periodic application of cover material during the day, maintenance of a small working face, and implementation of an active litter control program) are expected to be effective in limiting the attractiveness of the site to ravens and other birds. In the event ravens or other bird species are attracted to the site, various measures would be implemented on an as-needed basis to prevent bird populations from becoming established at the landfill. Section 5.6.5 of the Draft EIR/EIS included examples of such specific mitigation measures. These measures include, but are not limited to, the use of an overhead nylon line grid system (bird wires), distress tapes, propane cannons, and racket bombs. The effectiveness of these measures would be monitored and, if they are found not be completely effective, additional measures would be developed by Rail•Cycle in consultation with BLM, USFWS, and CDFG.

3. In addition, Rail•Cycle, in consultation with BLM and USFWS, completed a baseline raven study that includes an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys during this 12-month period documented current raven (as well as other bird species) populations and usage patterns in the study area. Baseline data gathered as a result of this study will be compared to data collected during the operation of the proposed landfill. If comparison of data indicates that ravens are being attracted to the site, or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented at the landfill, in consultation with BLM, USFWS, and CDFG.

Response 069-14

1. The Draft EIR/EIS stated that both literature searches and field studies, as to the potential or actual occurrence of desert tortoise in the vicinity of the proposed landfill, support the conclusion that no tortoises are resident on the site. Although portions of the Cadiz Valley (about ten miles east of the Bolo Station site) are designated by BLM as Category 1 desert tortoise

habitat, the proposed landfill site is within a relatively depauperate area that is uncategorized but managed by BLM as Category 3 habitat, as some tortoises are known to be in the surrounding area.

2. The Draft EIR/EIS addressed the different types of habitat in Section 4.6.2.1.4 and showed the location of the proposed site relative to areas of designated tortoise habitat in Figure 4.6.3.

Response 069-15

1. As described in Sections 5.12.1.1.1 and 5.12.1.2 of the Draft EIR/EIS, automobile and truck traffic is expected to increase along Amboy Road between Twentynine Palms and Amboy, along Interstate 40 and the National Trails Highway (Route 66) both east and west of the proposed site. These are currently well-traveled roads that have been in operation for many years. Therefore, the current number and diversity of wildlife species (including the desert tortoise) reflects their accommodation to the impact of these existing roadways in the desert environment.

2. The access road to the landfill operations area will extend south from the National Trails Highway (Route 66) for a distance of about two miles, through the northern portion of the Bolo Station site. While no tortoise occur at the site due to the poor habitat provided, a speed limit of 20 miles per hour on all onsite roads will be strictly enforced.

Response No. 069-16

1. The proposed mitigation measures for wildlife, paleontological, visual, and cultural resources, as outlined in Sections 5.6.5, 5.11.5, 5.9.5, and 5.10.5 of the Draft EIR/EIS, respectively, are designed to reduce potential impacts of the proposed action to below a level of significance. The commenter is correct in noting that an influx of population to service the landfill may have a potential for affecting wildlife, paleontological, visual, and cultural environments. However, such effects are likely to occur where workers and their families reside rather than where they work.

2. The proposed action would not provide employee housing within or near the project area. Rather, employees are expected to reside in Barstow or in established communities of the Morongo Basin such as Twentynine Palms, Yucca Valley, and others. These communities have established recreational programs, parks, and other facilities, at which new residents can be expected to participate, rather than establish new recreational activities in undeveloped areas at some distance from their homes. Since established recreational sites and facilities are currently managed by various city, County, or federal agencies, impacts to the wildlife, paleontological, visual, and cultural environments of these locales as a result of the proposed action are not expected to be significant.

Response 069-17

1. The commenter is incorrect in stating that a change in BLM designation of the Bolo Station site from L (Limited Use) to I (Intensive Use) would be required. The designation would be changed from L to M. The commenter is correct in noting that the final landfill configuration would be that of a mound on the desert floor, as shown in Figures 5.9.2 and 5.9.3 of the Draft EIR/EIS. However, other development is not planned for the area.

2. The vehicles that transport employees and supplies to the landfill, the landfill lights, and the noise associated with landfill activities would occur over the life of the facility, primarily within the boundaries of the site. No roads would be constructed outside of the site boundary. At the conclusion of landfill operations, the lights, people, and noise would no longer be a part of the site. The mounded and revegetated landfill would remain. The extent to which postclosure leachate collection and removal systems and surface drainage systems remain visible would depend on one's distance and direction from the site and the extent of revegetation.

Response 069-18

1. Section 5.14.1.2 of the Draft EIR/EIS incorrectly indicated that the proposed project would require reclassification of the land use designation of the proposed site from Resource Conservation to a land use that would allow more intensive use of the site. If the County Board of Supervisors approves the proposed project, the County General Plan would be amended to revise the Infrastructure Overlay Map and accompanying text to designate the site as the Bolo Station Landfill. The land use designation of Resource Conversation would be applied to the former public (i.e., BLM) land sections. The remaining sections of land at the proposed site are currently designated as Resource Conservation and would remain as such, if the proposed action is approved.

2. The proposed General Plan amendment is the mechanism for revising the Infrastructure Overlay

Map and text to designate the site as a landfill. The General Plan Amendment would be considered by the County Board of Supervisors during its consideration of the proposed project.

3. As discussed in Section 3.7 of the Draft EIR/EIS, the site selection process for the proposed landfill included a criterion that the site should be compatible with existing and future land uses. This criterion included consideration of regionally significant existing and future open space resources such as the East Mojave National Scenic Area, WSAs designated in the CDCA, the WSAs proposed for inclusion in the pending California Desert Protection Act, and the proposed Mojave Desert National Park included in the pending California Desert Protection Act. As discussed in Section 5.14 of the Draft EIR/EIS, the proposed project would not impact regionally significant existing or future open space resources.

4. The selection of the proposed site reflects in part a recognition of the existing development in the project area including:

   - Mineral production (salts) on and surrounding the Bristol Dry Lake (i.e., Cargill and National Chloride).
   - Modest development at Amboy and Chambless.
   - Transportation corridors (i.e., rail, road and pipelines).
   - Intensive agricultural operations at Cadiz (i.e., CLC).

   As noted in Section 5.14 of the Draft EIR/EIS, based on the avoidance of regionally significant existing and future open space resources, and the nature and extent of the existing development in the project area, while the proposed project is considered to have a significant impact on open space in the local vicinity of the site, the proposed project is not considered to have a significant impact on regional open space.

Response 069-19

1. Waste from the cities and counties of southern California that would be disposed of at the proposed landfill would be transported to the site by rail. The commenter's statement regarding waste-hauling trucks traveling through the Morongo Basin to reach the proposed landfill is not correct in terms of waste from outside the Morongo Basin.

2. If the communities of the Morongo Basin were to contract with Rail•Cycle for disposal of local waste at the proposed landfill, then waste hauling trucks (most likely 20 ton transfer trucks) would be used to transport the waste to the site. Under this scenario, it would be expected that the actual number of waste hauling trucks traveling from the Morongo Basin would be less than the current number of trucks used to transport waste to local landfills.

Response 069-20

1. The BLM has a standard list of approximately 600 agencies, elected officials, groups, individuals, and electronic and print news media that are notified regarding the availability of documents, such as the Draft EIR/EIS for Rail•Cycle, and regarding public meetings, such as the three public hearings held on the Draft EIR/EIS. In addition, the County provided the Notice of Availability of the Draft EIR/EIS to various newspapers in the region including the following:

   - Desert Dispatch
   - Desert Sun
   - Desert Trail
   - Hi-Desert Star
   - Inland Valley Daily Bulletin
   - Los Angeles Times
   - The Sun
   - Riverside Press-Enterprise
   - Victorville Daily Press

2. The Notice of Availability, which was also included in the Draft EIR/EIS, stated the place, date and time for the three BLM public hearings.

3. The distribution process for the Draft EIR/EIS and the announcement process for the public hearings met the requirements of CEQA and NEPA. While a reasonable effort was made by the County and BLM to notify the public about the availability of the Draft EIR/EIS and the public meetings, it is not possible to assure that each interested individual is notified.

Response 069-21

1. During preparation of the Draft EIR/EIS, comments provided in response to the NOP and during the public scoping process were evaluated and appropriately responded to in the Draft EIR/EIS. These comments were used as the basis for the analysis in the Draft EIR/EIS, but it is not required to provide individual responses to each comment.

Response 069-22

1. See Response 069-5.

070

RECEIVED

February 26, 1993

County of San Bernardino
Planning Department
385 N. Arrowhead, 3rd Floor
San Bernardino, CA 92415
Att: Randy Scott

Dear Mr. Scott and San Bernardino County Planners:

Although we live in Riverside County, we are none the less concerned about the proposed Rail Cycle Bolo Station Landfill near Amboy as well as other dumps planned for the Desert. All are in rather close proximity to each other and also to us. Just because county or state lines are drawn on a map, it does not mean contamination of water and air stops there. Other alternatives to digging a hole and depositing trash should be considered, such as "high-rate composting" and "land-fill" mining where compost and recyclables are removed from old landfills. When a lining is installed, the old landfill can be used for many more years. If this is done and everything possible is recycled from that point, new dumps would not be needed. ①

We are certain that many, many concerns have been brought to your attention. We would like to add our voices to those who have already contributed to your hearings.

1. We are concerned about the possibility of earthquakes jolting the area, causing the ground to rupture and contamination of water to occur. ②

2. We are concerned about traffic accidents causing bodily injury and property damage. ③

3. If accidents occur, we are concerned also about the spilling of waste which would attract flies and other pests that spread disease. ④

4. We are concerned about the smell of the trains, the transfer stations and the dump itself. We believe it is a threat to the environment and to the animals (including man) living near the dump and along the tracks and roadways. It will destroy air quality. ⑤

5. We understand that excavation would destroy archaeological sites which should be protected. ⑥

We do not believe this is the highest and best use for the land. It is not necessary. Public lands belong to the people and should not be used for garbage dumps. Only those who make money from these enterprises benefit. Please oppose this project in all forms suggested in the EIR/EIS. ⑦

Sincerely,
Mr & Mrs H.R. Toenjes

M/M H.R. Toenjes
James Toenjes
Julianne Toenjes
1863 Park Dr.
Palm Springs, CA 92264

Dollie Irwin
420 N. Morongo Ave.
Banning, CA
92220

John Cornwall
611 S Palm Canyn.
#7-284
Palm Springs, CA
92264

DOCUMENT 070
MR. AND MRS. H.R. TOENJES, DOLLIE IRWIN & JOHN CORNWALL
RESPONSE TO COMMENTS

Response 070-1

1. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, which was developed in response to Los Angeles County Sanitation District's request for long-term landfill capacity, would meet that need by helping satisfy the state's requirements, mandated by AB 939, for cities and counties to provide at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise be feasibly reduced at the source, recycled or composted.

2. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this issue, see Section 3.3 of the Supplement.

Response 070-2

1. The geophysical survey and trenching analysis requested by the RWQCB was completed to verify the presence or absence of active and potential active faults at the proposed site (Jacobs, 1993a). This analysis confirmed the previous findings and conclusions confirmed that there are no Holocene faults at or trending towards the proposed site. For a complete discussion of the results of this verification analysis, see Chapters 4.0 and 5.0 of the Supplement.

Response 070-3

1. Section 5.12 of the Draft EIR/EIS indicated that operation of Rail•Cycle trains would not contribute to a significant increase in existing hazards at rail crossings.

Response 070-4

1. Potential impacts to ground water due to spills, accidents or other hazards associated with rail operations were discussed in Section 5.8.1.2 of the Draft EIR/EIS. Although impacts are not anticipated, a communication procedure will be established so that the site environmental manager would be notified should railcars transporting solid waste from the MRFs to the landfill be involved in a mishap. ATSF, as the rail line owner/operator, has established emergency response plans, procedures, and personnel and equipment to respond to emergency situations that may occur during transport of waste to the proposed landfill. These existing ATSF procedures include notification and coordination with local emergency response agencies.

Response 070-5

1. As discussed in Section 3.2.2 of the Draft EIR/EIS, the containers used to transport solid waste from the MRFs to the proposed landfill would be constructed to assure that liquids do not escape. After loading at the MRF, and during transit to Bolo Station, fresh air would not be allowed to flow through the containers. The containers would be equipped with a vent hatch which would be closed at all times, except at the landfill working face, where it would be opened to allow air to enter the container to assist in tipping of solid waste from the container. As stated in Section 5.8.1.1.5 of the Draft EIR/EIS, no significant impacts with regard to odor are expected.

2. Based on comments on the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement included refinement and reevaluation of the impacts and mitigation. MDAQMD has reviewed and submitted comments on the EIR/EIS, and has concurred that the proposed action would have a significant impact on air quality of the SEDAB after mitigation.

Response 070-6

1. Since filing of the Draft EIR/EIS, the Section 106 Process, as required by the National Historic Preservation Act of 1966 and implemented by the 36 CFR Part 800 procedures, "Protection of Historic Properties," has been completed. BLM, as the lead agency for this process, consulted with the SHPO as required. Of the 22 archaeological sites and 8 isolated finds recorded in the Bolo Station Landfill project area, all but one site (SBr-2910H) were found to be ineligible for National Register listing and, therefore, are not considered significant and do not require further management or treatment considerations. It should be noted that some of the sites evaluated as ineligible were previously subject to subsurface excavations and data collection, during which the significant data contained by the sites were recovered (Lerch, 1992).

2. The one site determined eligible for NRHP listing, site SBr-2910H, will not be affected by the proposed action due to the adaptive reuse of the roadway for landfill traffic, which is consistent with the resource's original use as a regional thoroughfare. SHPO, in consultation with BLM, found that the proposed action would not result in adverse effects to significant cultural resources in the project area. Therefore, the Section 106 Process for the proposed action is complete. Copies of the SHPO concurrence on no adverse effect was included as Appendix C in the Supplement.

Response 070-7

1. The commenter's opposition to the project is noted; however, this comment does not raise an issue regarding the information included in the Draft EIR/EIS. No specific response is required.

071

GEORGE W. ROBINSON
7501 Palm Avenue, Sp 140
Yucca Valley, California 92284

County of San Bernardino, Planning Dept.
385 N. Arrowhead Ave, 3rd Floor
San Bernardino, CA 92415-0182

Attention: Mr. Randy Scott

RE: Rail-Cycle
Bolo Station Landfill

Dear Mr. Scott:

I attended the 29 Palms meeting regarding the above sit and it seemed, to me, the biggest complaint the people had was that the garbage was coming from Los Angeles and the people in 29 Palms didn't want to be bothered with anyone else's garbage.

Since the people are approximately 40 miles from the proposed dump site and the wind is from the West approximately 93% of the time and North the other 7% of the time it seems to me that the disposal site would and should not affect them.

Most of the cars the people drove to 29 Palms are from Detroit or Japan and there's many of these sitting in the desert that will or do need a dump site and they should be thinking of the polution this creates in the desert instead of something that is going to be buried.

One of the people there was from New Mexico and since he is several hundred miles away I don't think the dump site could abuse him to much.

I had a cattle ranch in Essex from 1951 thru 1953 and have been in and around the desert for many years and still own property in 29 Palms, Yucca Valley and Needles and do believe that people should live and let live if it doesn't harm them.

This project could mean jobs for the area and people complain they are out of work and no jobs are available. This would not only provide the jobs needed but would put land to use that is really only good to hold the rest of the world together.

Sincerely,

George W. Robinson

George W. Robinson

DOCUMENT 071
GEORGE W. ROBINSON
RESPONSE TO COMMENTS

Response 071-1

1. This letter supports the proposed Rail•Cycle-Bolo Station Landfill. As it does not provide a comment regarding the EIR/EIS, no specific response is required.

072

March 3, 1993

RANDY SCOTT, Senior Planner
Environmental Team
San bernardino County

Henri R. Bisson
District Manager
Bureau of Land Management

Dear Sirs:

I was unable to appear at one of your three public meetings because of personal problems. I would like to address the problems as I see them in regard to the proposed Rail*Cycle-Bolo Station landfill.

I do not feel we should amend the BLM desert plan or the County of San Bernardino General Plan to allow this type of private business to opperate anywhere in the Mojave Desert.

No testing has been done to establish the preservation of an overdrafted water table. ①

Additional dust will affect salt production.

No provision of this proposal guarantees that no traffic delays will be caused by additional rail and truck traffic at the Amboy Rd. rail crossing: an overpass of the railroad should be built. A 4 way stop sign at U.S. 66 and Amboy Rd. should be installed. ②

Some provision and guarantee should be made to improve the poorly maintained Amboy Rd. which will be damaged by additional truck traffic . ③

I do not see the need for granting the 800 by 2,640 feet right away of property bordering Historic Route 66. Leave it in a natural state as an open buffer with Rail* Cycle to maintain and clean the area. ④

With Americans generating an average of 3.6 pounds of trash per person each day, there is a need to recycle, not bury it in the Mojave desert. ⑤

The M.R.F.'s or tranfer stations, which supposedly remove recyclables, are not addresses and there is the key to true reduction of waste. So far, our determination of what is recyclable is determined by its' market value, not by whether it is reusable. Example: Glass, auto and truck tires. ⑥

This Rail*Cycle operation is a private business which will bury what it is shipped in accordance with E.P.A. rules. E.P.A. will not provide on site inspectors, although it may monitor the books once a year. There is no limit that can be placed by the city, county or state on any company engaged in interstate commerce. The people of Indiana passed a law to block outside waste only to be rejected by a Federal Judge, who quoted a supreme Court decision that declared garbage a commodity. ⑦

Most of the cities and counties of Southern California do have vacant land usable as Landfills., although this land is more expensive and there are a lot more N.I.M.B.Y.s that make it seem difficult.

Sincerely, George E Goemans

George Goemans
HCO 1 BOX 118
4080 Desert Heights Drive
Twentynine Palms, Ca 92277

DOCUMENT 072
GEORGE GOEMANS
RESPONSE TO COMMENTS

Response 072-1

1. Subsequent to distribution of the Draft EIR/EIS, additional analysis regarding ground water quantity was completed for the proposed action and included in the Supplement Sections 4.2 and 5.2. This subsequent analysis concluded that the proposed action would not adversely affect other ground water users in the area (i.e., Cargill, National Chloride, or CLC). Cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin. In the event that Bristol Basin is in overdraft, it would be considered a significant unavoidable adverse impact.

2. Based on additional analysis, only minor ground subsidence is expected to occur with the withdrawal of ground water for the proposed action.

Response 072-2

1. The potential impacts at the various rail/highway grade crossings leading to the Bolo Station site were addressed in Sections 4.12 and 5.12 of the Draft EIR/EIS and in Appendix I, where Table I.2 provided the hazard index for Existing Conditions and Tables I.3 and I.4 provided the hazard index for initial and ultimate potential conditions.

2. While the proposed action would result in an incremental increase in the number of trains using identified rail segments, the U.S. Department of Transportation, Federal Railroad Administration, and the PUC are responsible for implementing a program within the state to improve railroad/ roadway grade crossings. This program acknowledges that increases in the volume of train traffic and/or vehicular traffic on roadways that cross rail lines, which occur incrementally over time, may require improvements at various grade crossings. These improvements may consist of additional rail crossing safety devices to warn drivers of vehicles of an approaching train, or even physical separation of rail lines from roadways through the construction of overpasses/ underpasses. Grade crossing improvement projects identified through this program are jointly funded by the federal and state government and the railroad companies.

3. The proposed action is just one of various components that result in incremental increases over time that requires improvement of railroad/roadway grade crossings. The EIR/EIS provides adequate information to characterize the impact the proposed action would have on grade crossings. As there is a program established to address these types of incremental impacts at grade crossings and fund the necessary improvement, no specific mitigation measure is required for the proposed action.

Response 072-3

1. It is expected that Amboy Road would be affected by project-related personnel and other vehicles added to the existing levels of about 630 vehicles/day. Amboy Road has a capacity of about 12,000 vehicles per day, to maintain LOS of A. The increase in total traffic volume would not result in a lower LOS and so the new traffic would not have a significant effect according to the criteria specified in the Draft EIR/EIS (page 5.12-1). Further, no requirement to upgrade the roadway is expected. Maintenance of Amboy Road is a County responsibility and assuming that most of the traffic between the Morongo Basin and the site consists of personal vehicles, this would not result in additional maintenance requirements.

Response 072-4

1. As discussed in Section 3.2.1 of the Supplement, the need for the 800- by 2,640-foot right-of-way across federal lands to provide permanent access to the proposed landfill, has been eliminated. However, the right-of-way may be used for temporary access during construction.

Response 072-5

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. As discussed in Chapter 2.0 of the Draft EIR/EIS and Chapter 2.0 of the Supplement, a commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:

- Source reduction.
- Recycling and composting.
- Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling, and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled, or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirmed that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 072-6

1. To enhance public understanding of how a MRF might serve the proposed action, a description of a typical MRF was provided in Section 3.2.2 of the Draft EIR/EIS. However, inclusion of this general description should not be construed to mean that construction and operation of MRFs is a part of the proposed action. To date, only the MRF in the City of Commerce has been approved. Any effort on the part of the EIR/EIS to predict where additional MRFs could be located, and to try to assess those impacts, would be speculative and misleading. CEQA and NEPA do not require speculative analysis, but rather requires analysis of only those parts of a proposed action that are reasonably foreseeable.

Response 072-7

1. A regulatory framework is in place to assure that the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design, operation, and closure of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

2. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

28 Feb 1993

County of San Bernardino
Planning Department
385 North Arrowhead Ave., 3rd floor
San Bernardino, CA 92415-0180

MAR 1993
RECEIVED
BY

Dear Mr. Randy Scott,

This is my response to the Draft EIR for the Rail Cycle Bolo Station Landfill, State ClearingHouse # 91092020.

① Table 3.2 on page 3-6 shows 28% of the projected waste stream is recycled. AB 939 requires 50% of the projected waste stream be recycled by the year 2000. How are you going to fulfill AB 939 requirements?

② Paragraph 3.3.2.1.3.4 on page 3-31 says an alternate daily cover of synthetic material will be used. What chemicals are in the synthetic cover? How will it be brought on site?

③ Paragraph 3.3.2.1.4.1.6 on page 3-35 says leachate will be reintroduced at the active working face. Is the leachate toxic? How will workers at the active face be protected? Where will the leachate be taken when the landfill is completed and there is no active face?

④ Section 5.5.6.1 on page 5.5-2 says the final thickness of the topsoil layer of final cover will be based on the "vegetative species included in the reclamation plan." This ignores vegetative species that may be introduced by wind or animals. Their roots may go beyond what planned species are accounted for. Also animal species such as the kangaroo rat or kit fox can borrow into the top soil. Therefore the final cover depth must include all possible flora and fauna species.

⑤ Section 5.5.6.3 on page 5.5-3 says eroded topsoil will be replaced per CCR TITLE 14. TITLE 14 only requires 30 years of post closure maintenance. Soil erosion will occur indefinitely. Who will be responcible for replacing the topsoil for the millenia? Who is responcible for the site after 30 years after closure?

Sincerely,

Allen Arata
14722 FONTHILL AVE
HAWTHORNE, CA 90250

DOCUMENT 073
ALLEN ARATA
RESPONSE TO COMMENTS

Response 073-1

1. The commenter misinterpreted the information with regard to the percentage of recyclables presented in Table 3.2 of the Draft EIR/EIS. As discussed in Section 2.2 of the Supplement, to meet the goals of AB 939 (25 and 50 percent reduction by 1995 and 2000, respectively), cities and counties are required to promote a combination of the following waste management practices:

   - Source reduction
   - Recycling and composting.
   - Environmentally safe transformation (e.g., waste-to-energy) and land disposal.

   Therefore as stated in Table 3.2 of the Draft EIR/EIS, recycling 28 percent of the waste stream is acceptable in meeting a portion of the AB 939 mandate. The remaining reductions would be met through a combination of the waste management practices listed above.

Response 073-2

1. The use of an alternate daily cover of synthetic material at the proposed landfill is subject to the approval of regulatory agencies. Details regarding the specific type of alternate daily cover will be included in the SWFP and WDRs required by the LEA and RWQCB, respectively.

Response 073-3

1. Since properties of leachate may vary considerably, a comprehensive evaluation would be conducted to characterize leachate produced by the proposed landfill, and determine the most appropriate means of management. Leachate would cease being generated at some point during the postclosure monitoring period.

Response 073-4

1. In response to comments on the Draft EIR/EIS, the topsoil layer over the final cover of the landfill was increased to 2 to 3 feet, from 1 foot described in the Draft EIR/EIS. This change was made after consultation with NPS - Joshua Tree National Monument Center for Arid Land Restoration and was described in Section 3.2.7 of the Supplement.

2. A mitigation measure has been included in this EIR/EIS (see Table S.2) that requires Rail•Cycle to develop a detailed revegetation plan for the proposed landfill in consultation with NPS, Joshua Tree National Monument. This mitigation measure includes a requirement that Rail•Cycle establish a nursery at Bolo Station for germination and growth of native shrubs. Seeds of the native plant species will be harvested, cleaned, germinated, and grown in the nursery for two to three years. Plants would be artificially watered (drip irrigation) for one to two months. If drought conditions exist, the irrigation would continue for several months, thereby enabling the shrubs' root systems to become established. Overhead irrigation may be temporarily used on the landfill sideslopes to assist in the initial establishment of the revegetation; however, only a drip irrigation system would be used on the top slopes of the landfill. If long-term irrigation is required on the sideslopes a drip system shall be installed.

Response 073-5

1. If, after 30 years of post-closure monitoring and maintenance, the regulatory agencies (i.e., RWQCB and CIWMB) determine that the landfill still poses a threat to the environment, the agencies can require that the postclosure monitoring and maintenance continue.

074

1 March 1993

A MAR 1993 RECEIVED BY

County of San Bernardino, Planning Dept.
385 N. Arrowhead Ave., 3rd Floor
San Bernardino, CA 92415-0182
Attn: Mr. Randy Scott

Dear Mr. Scott:

The need for a waste landfill for "various cities and counties in Southern California" is understood. The need to locate a landfill in Cadiz for these residents is unacceptable to me as a resident of the desert for the past 25 years. I ask that the County of San Bernardino and the elected officials of communities seeking landfill space consider every other alternative that may have been discussed in the past or presented in the future. ①

As I've stated at two public meetings, I have not read the EIR/EIS and rely on information contained therein from those who have read the report and comment on it in public. I objected to the plan before attending any meetings and continue my objection more vehemently since attending the public meetings. There is nothing in the plan to improve life in the desert.

The premise that the rail-cycle landfill proposed would open 60 to 100 years of dumping is unthinkable. Once the fragile desert is open to such abominable destruction, it cannot be returned to its original condition. Acceptance of a landfill by desert residents would be seen as permission to use the desert as a dumping ground, a condition we try extremely hard to overcome at present from those who dump waste without regard to the effect on our land. Initial acceptance opens the door for future expansion of an active landfill or room to establish others. Desert land must be viewed as invaluable for current and future generations--it cannot be used as a dumping ground for millions who do not live in the desert. ②

The safety precautions projected for implementation in the landfill as discussed at public meeting and in the press leave me with great doubt. Review of private and government efforts to provide safe conditions throughout building structures, eliminating waste, unpolluted water, pollution control, clearance monitoring, etc. are riddled with incompetence, no plan of resolution, and/or many projects abandoned for lack of money, interest and/or know-how. Desert citizens are concerned with our environmental and physical safety. So am I. This project improves neither and puts us in jeopardy for uncalculated deterioration of both. Such risk cannot be asked of us.

The problem of waste must be solved by those creating the need. A better way to dispose of trash than dumping it on the desert must be found. Our land must be protected.

Sincerely,

DJ Masker

D. J. Masker

D. J. Masker
PO Box 2272
29 Palms, CA 92277

DOCUMENT 074
D.J. MASKER
RESPONSE TO COMMENTS

Response 074-1

1. CEQA and NEPA provide for the discussion of a "reasonable range" of alternatives. The discussion need not be exhaustive but rather is intended to provide adequate information for a comparative analysis of potential impacts. The range of alternatives discussed in the Draft EIR/EIS meets the intent of CEQA and NEPA. A clarified discussion of project alternatives was provided in Section 3.3 of the Supplement.

Response 074-2

1. Development of the Bolo Station Landfill would commit use of the desert terrain between the existing industrial uses on Bristol Lake, on the west, and the existing agricultural uses, on the east, to landfill activities for the next 60- to 100-years. The proposed landfill is sited in an area that has been subject to long-term industrial uses or land alteration practices, and does not involve previously remote or untouched areas of the desert.

2. The proposed action is a regional landfill to support public needs and regulatory requirements for southern California communities, rather than as a local landfill for the needs of a few specific communities in the proposed landfill vicinity. Local communities, however, are also expected to benefit from the project through establishment of a local repository for solid waste, which would deter random dumping in desert locales, an area of concern for the County and BLM. Additionally, these communities are also expected to benefit from the project in future years as existing landfill capacity in the County becomes exhausted in the next eight years.

3. The desert is not looked upon as a dumping ground, and the fragile qualities of the desert have been addressed in the EIR/EIS. It is true that the siting of a large, long-term disposal facility in this portion of the desert may contribute to a change in the character of the desert in the vicinity of the proposed landfill to a more intensive land use, but this trend has been in existence since the salt works were established on the bed of Bristol Dry Lake in the early twentieth century.

4. Upon completion of each landfill cell and upon final closure of the landfill, mitigation measures call for: (1) configuring of the landfill slopes and surface to blend into, rather than contrast with, the existing desert topography, and (2) revegetation with native plant species. The landfill site would not be returned to its original condition, but final landfill closure procedures are designed to provide habitat values for plants and wildlife comparable to those currently available onsite.

DOCUMENT 075

Response 075-1

1. This document number was inadvertently assigned to a comment letter on the Draft EIR/EIS. There is no comment letter or Document 075.

076

22 Feb 93
Della Ann Knaggs
2225 Bullion Ave
Marine Corp Base
29 Palms, Ca 92278

Dear Fourth District Supervisor Larry Walker;

Sir I thought you may want to hear how some of us feel.

Many of the people including my "Husband and I" have moved to the "Desert" some at great sacrifice of good paying jobs etc... to enjoy the beauty of "Desert life" the "pristine Air" the "Clean Skies" the beautiful "Sunsets, Stars, and Wildlife". To escape the "Many Problems, the Air and Noise Pollution of "Big Cities". To raise "Our Children" in "Hard To Find" "Decent and Clean Environment."

In addition to Others who have moved here "Due" to "Health Problems".

The very thought that "San Bernardino County" would even consider the "Rail-Cycle Bolo Landfill" (possibly the "Largest Waste Site" in the "World") is not only shocking, but appalling to us here.

We absolutely infuriated to think that Our "Elected Officials" would actually sell out the very "People" who "Elected" them to "Office." ①

We strongly opposed to the prospect of having "Our 'Desert areas' Polluted" by "Billions of Gallons of Diesel Fuel, Noise and a 420FT. High by three Miles wide" Stockpile of "Garbage and Debris" from "Cities and County" in the "Southern California Area." To add insult to injury "Only (11) Miles ② east of this proposed "dump site" is "Cadiz". A rich farmland consisting of approximately "26,000 acres" ("25-26 Sections") and another proposed "9,050 acres" if "approved". There are "1,140 acres" which are "Now being used to produce Organically grown Citrus, red and green grapes". This year they have been asked to grow "raisins", as well, this farming project is unique, and the only one of its kind, "Certified by Several Agencies" within the "State of California". ② CONT.

The "Cadiz Land Company" has been at that location for approximately "8-10 years." "First in" its development stages since the early 1980's.

Its earliest planting of grapes began in 1986,

This commercial grown produce is also shipped all over the world, and to Many Los Angeles based Chain Stores, such as Stater Brothers, Vons, Ralphs, Luckys, etc.... It would be criminal to put this "farming industry" and its "Workers", "Out of Business!!!!" And more "Unemployment."

We firmly believe in foresight "Not Hindsight!" And in the event that this proposed "Landfill" were passed the damages to the "Environment" would be irreparable, and highly expensive to those here would undoubtedly have to pick up the tab!!!!!

"You Can't buy Clean Air, Water or Good Health" "Once its Gone... Its Gone forever!!!!!"

My "Husband and I Urge" you to search your consciences, putting "People" and the "quality of life" and "Environment" above "Money and Greed" the proposed "Rail-Cycle Bolo Landfill" in its "entirety to include

076

All Others" proposed area "Altermate Sites"!

Mam I also would like to say since my "Husband" has fought for this "Land and Americana" so hard for "20 years", I ask you to "Please help us Stop" this from coming in to Our "Clean and beatitiful Desert and Clean Air!!!!!!!.

Thank you
Della Ann Kraggs VOTER
2225 Bullion Ave
Mainer Corp Base
29 Palms, Ca 92278

DOCUMENT 076
DELLA ANN KNAGGS
RESPONSE TO COMMENTS

Response 076-1

1. The EIR/EIS for the proposed Bolo Station Landfill is the first step in the process being conducted by the County and BLM to determine whether to approve or deny the proposed action. No decisions have been made by the County Planning Commission or the County Board of Supervisors, or BLM regarding the proposed action.

2. The information in the EIR/EIS will be evaluated by the County Planning Commission during public hearings that will be conducted once the EIR/EIS is complete. The Planning Commission will then make a formal recommendation to the Board of Supervisors regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

3. The County Board of Supervisors will consider the information in the EIR/EIS and the recommendation by the County Planning Commission during public hearings regarding the proposed landfill. The County Board of Supervisors will then vote regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

4. The public is encouraged to make its concerns known regarding the proposed landfill to the County Planning Commission and Board of Supervisors.

Response 076-2

1. The environmental effects of the proposed action as they relate to neighboring agricultural lands were analyzed in the Draft EIR/EIS in Sections 5.4, 5.7, and 5.14. Additional analysis regarding impacts to CLC operations were included in the Supplement (Sections 4.2 and 5.2).

2. To respond to this comment, a report was prepared addressing the potential for disease vectors to be attracted to agricultural crops in the vicinity of the proposed landfill. The report, *Agricultural Impact Report - The Potential Impact on Local Agriculture From the Proposed Rail•Cycle Bolo Station Landfill,* was prepared by Edwin Barnes, Ph.D., and summarizes experiences reported by researchers at Cal Poly (Barnes, 1993). The report addressed the potential for insect/nuisance vectors to be introduced into agricultural zones and referenced the following agricultural operations conducted in proximity to currently operating landfills:

   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile of the 2,800 ton per day County of Los Angeles Spadra Landfill.
   - Privately owned and operated orchards situated in proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

3. The following discussion highlights the findings of the above report:

   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported health or safety impacts.
   - Negative effects, attributable to landfill operations on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Unpaved internal roads within the Cal Poly campus farm are responsible for more fugitive dust-related impacts on agricultural operations than fugitive dust emitted from the Spadra Landfill.
   - Citrus trees located three-tenths of a mile from the Highgrove Landfill do not exhibit more dust or dirt than trees one mile away and in the middle of the orchards.
   - The Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

4. The following mitigation measures were recommended in the report to minimize potential agricultural impacts:

   - Implementation of fugitive dust control measures, including watering, use of dust abatement products, construction of berms, speed limit controls, and curtailing operations during occasional high winds. This mitigation measure is already included in the EIR/EIS for the proposed Bolo Station Landfill.

- Installation of a pole and wire system or some other effective alternative for control of birds. This mitigation measure is included in the EIR/EIS for the proposed Bolo Station Landfill.
- Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

5. Based on the above findings and mitigation measures, the marketability of CLC produce is not expected to be affected by development and operation of the proposed landfill.

MAR 03 1993

22 Feb 93
Della Ann Knaggs
2225 Bullion Ave.
Marine Corp Base
29 Palms, Ca. 92278

Dear First District Supervisor, Marsha Turoci;

Max I thought you may want to hear how some of us feel.

Many of the people here including my "Husband and I" have moved to the "Desert" some at great scarifice of good paying jobs, etc... to enjoy the beauty of "Desert life" the "pristine air" the "Clear Skies" the beautiful "Sunset, Stars and Wildlife". To escape the "Many Problems the Air and Noise Pollution" of "Big Cities". To raise "Our Children" in "Hard to Fine" "Decent" and "Clean Enviornment".

In addition to others who have moved here "Due" to "Health Problems".

The very thought that "San Berardino County" would even consider the "Rail-Cycle Bolo Landfill" (possibly the Largest "Waste Site" in the "World") is not only shocking, but appalling to us here.

① We are absolutely infuriated to think that Our "Elected Officials" would actually sell out the very "People" who "Elected" them to "Office".

We strongly opposed to the prospect of having "Our Desert areas Polluted" by "Billions Of Gallons of Diesel Fuel, Nosie And a 420 Ft. High By Three Miles Wide" stockpile of "Garbage and Debris" from "Cities" and "County" in the "Southren California Area".

② To add insult to injury "One (1) Mile" east of this proposed "dump site" is "Cadiz". A rich farmland consisting of approximately "26,000 acres" (25-26 Sections) and another proposed "9,000 acres" if "approved". There are "1140 acres" which are "Now being used to produce Organically grown Citrus red and green grapes". This year they have been asked to grow "raisins", as well, this farming project is unique, and the only one of its kind, "Certified by Several Agencies" within the "State of California". The "Cadiz Land Company" has been at that location for approximately "8-10 years". "First in" its development stages since the early 1980's. Its earliest planting of grapes began in 1986.

This Commercia grown produce is also, shipped all over the world, and to many Los Angeles based Chain Stores, such as Stater Brothers, Vons, Ralphs, Luckys, etc. It would be criminal to put this "Farming industy" and its "Workers", "Out of Business"!!! in lieu of a pile of "Rubbish and Air Pollution" and more "Unemployment"!

We firmly believe in foresight "Not Hindsight"! And in the event that this proposed "Landfill" were passed the damages to the "Environment" would be irrepables; and highly expensive to those here would undoubtedly have

077

to pick up the tab!!!! "You can't buy Clean Air, Water or Good Health!" "Once its Gone... Its Gone forever!!! My "Husband and I" "Urge" you to search your consciences putting "People" and the "quality of life" and "Environment" above "Money and Deny" the proposed "Rail-Cycle Bolo Landfill" in its "entirety to include All Other" proposed area "Alternate Sites".

Mam I also would like to say since my "Husband" has fought for this "Land and Americana" so hard for "20 years", I ask you to "Please help us Stop" this from coming into Our "Clean and beautiful Desert and Clean Air"!!!

Thank you
Della Ann Knaggs Voter
2225 Bullion Ave
Marine Corp Base
29 Palms, Ca 92278

DOCUMENT 077
DELLA ANN KNAGGS
RESPONSE TO COMMENTS

Response 077-1

1. This is the same letter that is designated as Document 076 in this EIR/EIS. The only difference between the two letters is the person to whom the letter is addressed. Document 076 is addressed to Fourth District Supervisor Larry Walker and Document 077 is addressed to First District Supervisor Marsha Turaci. Document 076 and 077 are both included in the EIR/EIS for purposes of completeness of the administrative record.

2. For responses to comments raised in Document 077, see the Responses 076-1 and 076-2.

2 March 1993 **078**

County of San Bernardino, Planning Dept.

Dear Mr. Randy Scott

The Draft EIR/EIS on Rail Cycle - Bolo Station Landfill admits that "impacts on the following would remain significant and unavoidable even after mitigation: ground water supply, air quality, visual resources, land use and socioeconomics." (From Abstract, Cover Sheet EIR/EIS Bolo Landfill)

Public lands should not be used as a dumping ground for everyone's waste! ①

The best way to permanently solve the trash problem is source reduction and investment in the newer technologies to reclaim material in current landfills and recycle more material. ②

Situating a multi-county trash dump between scenic desert areas such as the East Mojave and the Joshua Tree National Monument is a travesty. Further, Rail Cycle Corp. is a part of Waste Management Inc. which has a history of environmental and anti-trust violations. ③

Local treatment offers greater control and more jobs in local communities as well as greater opportunity to try new technologies. The solutions for solid waste management are within each community not in huge dumps in someone else's community.

Sincerely,
Esther L. Herbert
P.O. Box 249
Twentynine Palms Ca. 92277

MAR 1993
RECEIVED
BY

DOCUMENT 078
ESTHER L. HERBERT
RESPONSE TO COMMENTS

Response 078-1

1. The proposed action would require the use of two and one-half sections (1,600 acres) of publicly owned lands managed by BLM. However, to use these lands Rail•Cycle must exchange them for privately held lands of equal or greater value, as determined by BLM, than the public lands that would be used. The proposed action includes the exchange of three sections (1,920 acres) of private land with greater wildlife habitat, particularly for the desert tortoise, than the public lands within the proposed site.

Response 078-2

1. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to southern California communities after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, which was developed in response to a request by the Los Angeles County Sanitation Districts for long-term landfill capacity, would meet that need by helping satisfy the state's requirements, mandated by AB 939, for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise be feasibly reduced at the source, recycled or composted.

2. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action.

Response 078-3

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

079

079

CONSTRUCTION RESEARCH CENTER

College of Architecture
Georgia Institute of Technology
Atlanta, Georgia 30332-0155

(404) 894-2070

December 18, 1991

Mr. Sylvester Brooks
405 East Maitland Street
Ontario, California 91761

Dear Mr. Brooks:

Thank you for your phone call of December 17, 1991 requesting additional information on our asbestos destruction project. I appreciate your interest in our research program.

Per your request, attached is some additional information on our research program and on municipal waste disposal. The final report is under review at the present time. The Phase 2 program for asbestos destruction should begin in a few months, and is expected to last for two years. If successful, this phase should result in the design of a prototype Plasma Asbestos Pyrolysis System (PAPS). ①

If you have any questions on the enclosed materials, please do not hesitate to contact me.

Sincerely,

Louis J Circeo

Louis J. Circeo, Jr., Ph.D.
Director, Construction Research Center

Enclosures

LJC:jb

64 page package,
(see Public hearing
Transcript Book)

Sylvester L Brooks
405 E Maitland
Ontario Ca 91761

GT

LOUIS J. CIRCEO, Ph. D., P.E.
PRINCIPAL RESEARCH SCIENTIST/DIRECTOR
CONSTRUCTION RESEARCH CENTER

COLLEGE OF ARCHITECTURE
GEORGIA INSTITUTE OF TECHNOLOGY
ATLANTA, GEORGIA 30332-0159
(404) 894-2070

Mr Brooks,
This is the "promise" of plasma arc technology for municipal waste disposal.
LJC

THE ATTACHMENT TO THIS LETTER HAS NOT BEEN INCLUDED DUE TO ITS LENGTH. THE INFORMATION PROVIDED BY THE ATTACHMENT HAS BEEN CONSIDERED IN DEVELOPING RESPONSES TO COMMENTS (SEE SPECIFIC RESPONSES). A COPY OF THE ATTACHMENT IS ON FILE AT THE COUNTY PLANNING DEPARTMENT AND BLM FOR PUBLIC REVIEW.

DOCUMENT 079
SYLVESTER L. BROOKS
RESPONSE TO COMMENTS

Response 079-1

1. This package of information was presented by Sylvester L. Brooks at the BLM's Public Hearing on the Draft EIR/EIS held in San Bernardino on February 11, 1993. The package includes information regarding the thermal destruction of asbestos.

2. Certain types of asbestos can be disposed of at Class III landfills. If asbestos is accepted for disposal at the proposed landfill, it would be handled in accordance with applicable federal and state regulations.

Iva Feldman
H.C. 01 Box 2174
69761 Sunnysande Dr.
Twentynine Palms, CA. 92277

3-16-1993

MAR 1993
RECEIVED
BY

Aileen Deardorff
San Bernardino County Planning Department
355 N. Arrowhead Ave.
San Bernardino, CA. 92415-0182

Ms. Deardorff,

Once again I want to object to the proposed " Rail Cycle, Bolo Station Landfill project ":

Because there are no gurantees of the safety! Only opinions that it will be safe, and past projects have proven false to that kind of thinking, and a lot of tax payer dollars will be spent to clean up the mess, if it can be cleaned up at all.

① Plus the "Landers, California Earthquake of 1992", Should make you all, turn down the project. According to the experts in that field, they simpely do not know where all the big faults are, and the "Landers fault" is a grand example, As it was a Big Surprise! So who can be sure of this project on that information alone? ① CONT.

We all know that the money the County will be recieving, is a big incentive. But just let me say, my family has lived in the Twentynine Palms Area for the past thirty nine years, my children all went to school here, and now their children are in the schools here. That is my reasons for keeping our desert "clean and unspoiled" for the future generations.

Thank you for considering my concerns, I hope the right decision is made.

Reguards,
Iva E. Feldman

DOCUMENT 080
IVA FELDMAN
RESPONSE TO COMMENTS

Response 080-1

1. The geophysical survey and trenching analysis was completed to verify the response or absence of active and potential active faults at the proposed site as requested by the RWQCB (Jacobs, 1993a). This analysis confirmed the findings in Sections 4.2 and 5.2 of the Draft EIR/EIS indicated that there are no Holocene faults at or trending towards the proposed site. For a complete discussion of the results of this verification analysis, see Sections 4.1 and 5.1 of the Supplement.

Dear Supervisor Turoci,

I am opposed to the "rail-cycle" plan for ①
trash to Ward Valley. There is no reason why
we citizens can't be responsible for separating ②
our trash for recycling. I am not aware of any
plans in govt. to cut back westeful packaging. ③
We live ½ mile from the railroad tracks near Spring
Valley Lake. Can one imagine the noise that would ④
be generated from all the trash trains? It would
not be pleasant in Mojave Narrows Park! This is a ⑤
poor way to generate jobs. This wasteful country ⑥
must learn responsibity. Sincerely, Patricia Chapman

DOCUMENT 081
PATRICIA CHAPMAN
RESPONSE TO COMMENTS

Response 081-1

1. The opposition of the commenter to the Rail•Cycle plan for waste disposal is noted. The proposed landfill site is located in the Bristol Lake Basin southeast of Amboy rather than in Ward Valley. A low-level radioactive waste disposal facility is being considered for Ward Valley.

Response 081-2

1. Chapter 2.0 of the Supplement discussed requirements for waste reduction and recycling on the local or community level, and associated waste disposal reduction objectives required statewide pursuant to AB 939. Specific waste reduction and recycling strategies already in-place or planned for metropolitan Los Angeles County communities are reviewed, and other communities in the state can expect to participate in similar programs to reduce total waste volume requiring landfill disposal in California. As Chapter 2.0 of the Supplement detailed, even with rigorous waste reduction and recycling efforts, a public need for additional long-term landfill capacity in southern California remains to be satisfied.

Response 081-3

1. Since the passage of AB 939 in 1989, waste reduction efforts, recycling programs (such as curbside recycling), and increased government and private sector use of, and market development for, recycled products have been initiated in California cities and counties. However, this is not part of the environmental review process based on CEQA/NEPA regulations.

Response 081-4

1. Potential noise impacts associated with the proposed action have been clarified as part of the subsequent analysis for the Supplement (Sections 4.5 and 5.5). The analysis indicated that noise impacts would not be significant and therefore do not require mitigation.

Response 081-5

1. Rail traffic related to the proposed Bolo Station Landfill would be scheduled for nighttime and early morning hours. Increases in rail traffic and noise are not expected to impact recreational uses of Mojave Narrows Park, since peak usage of the park is during daytime hours.

Response 081-6

1. A primary objective of the proposed action is to satisfy a public need for long-term waste disposal. The proposed action is not considered to be growth inducing, and, therefore, generation of in-county jobs was not considered a significant factor, either pro or con, in development of the proposed action. Approximately 257 workers will be required for the initial construction phase and 288 permanent workers for the full operations scenario. Permanent workers are expected to be derived from local communities to the extent possible and are expected to be residents or become residents of Barstow or the larger communities of the Morongo Basin.

SECTION 2.6

PETITIONS/PUBLIC HEARING TRANSCRIPTS COMMENTS AND RESPONSES

COMMITTEE FOR PROTECTION OF RURAL INDEPENDENCE
C/O WILLIAM M. DAVIS
HCO2, BOX 450A
TWENTYNINE PALMS, CA 92277

William M. Davis, Chairman
(619) 367-7694

Ray Kirkham, Vice-Chairman
(619) 367-1973

FEB 1993
RECEIVED
BY

February 22, 1993

San Bernardino County Planning Department
385 N. Arrowhead 3rd Floor
San Bernardino, CA 92415
Attn: Mr. Randy Scott

Dear Sirs:

Enclosed please find petitions in opposition to the Rail-Cycle Bolo Dump for inclusion in the administrative record. These petitions and others of similar content circulated by others are the only way many have of inputting the environmental process as the hearings on this project so far have been so poorly publicized and inconvenient for working people to attend. We believe this issue is larger than County government and feel the process is misplaced. We have decided to not even dignify this proposed project with the name "landfill," as it is simply a dump. ①

2.6-1

Yours truly,
Ray Kirkham
Ray Kirkham Vice-Chairman, CPRI

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

Signature - Printed Name - Address - Resident. Voter - Owner property

Phylis Croonenberghs PHYLIS CROONENBERGHS 74041 Samarkand Dr 29 Palms, CA 92277 yes — yes

Sharon Volcic Sharon Volcic 8423 Deer Trl. YV 92284 yes - yes

Austin Marquit P.O Box 308 29 Palms, CA. 92277

Evelyn Marquit P.O. Box 308 29 Palms, CA. 92277

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-2

[illegible] M. Kirby 3050 TOGA AVE. HC1 Box 988 - 29 Palms 92277

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

Terera Graws 6588 Sahara 29 Palms

92277

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-3

BEDENT R GALLUP
74044 Cottonwood Dr Property Owner ✓ Voter ✓
29 Palms, Cal 92277
1-619-367-9961

Loraine L. Gallup LORAINE L. GALLUP
74044 Cottonwood Dr
29 Palms, CA. 92277
1-619-367-9961
Resident ✓ Property Owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Howard L Harrison Print name HOWARD L HARRISON
   Address 6552 Chella Ave
   Resident ✓ Property owner X Voter X
2. Signature W. H. Busbridge Print name W H BUSBRIDGE
   Address 5438 Adobe Rd.
   Resident ✓ Property owner ✓ Voter ✓
3. Signature ______ Print name ROBERT HOLDSWORTH
   Address YES
   Resident ____ Property owner ____ Voter ____
4. Signature [illegible] Print name ______
   Address ~~6313 [illegible]~~
   Resident ✓ Property owner ✓ Voter ✓
5. Signature Virginia L [illegible] Print name VIRGINIA L MORNING
   Address 6395 Morning Lupine Cir - 29 Palms
   Resident ✓ Property owner ✓ Voter ✓
6. Signature Jean M Poplin Print name Jean M. Poplin
   Address 5778 Ocotillo Ave - 29 Palms
   Resident ✓ Property owner ✓ Voter ✓

7. E. Patrice Yanke E BERNICE YANKE
6383 Desert Queen Ave 29 Palms

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Howard Clayton Print name HOWARD CLAYTON
Address 5775 HALL LANE 29 PALMS CA 92277
Resident ✓ Property owner ✓ Voter ✓
2. Signature Christine T. Clayton Print name CHRISTINE T. CLAYTON
Address 5775 HALL LANE 29 PALMS CA 92277
Resident ✓ Property owner ____ Voter ____
3. Signature Raymond J Sellers Print name RAYMOND J SELLERS
Address [illegible] HCO 1 BOX [illegible]
Resident ✓ Property owner ✓ Voter ✓
4. Signature Harold Moore Print name HAROLD MOORE
Address H.C.O. 1 Box 3128 @ 69833 [illegible] Lane
Resident ✓ Property owner ✓ Voter ✓
5. Signature Anita June Mercy Print name ANITA JUNE MERCY
Address 3031 Shoshone Valley Rd - HCO - Box 2181A - 29 Palms, Calif 92277
Resident ✓ Property owner ✓ Voter ✓
6. Signature Floyd L. Mercy Print name Floyd L. Mercy
Address 3031 Shoshone Valley Rd 29 Palms Ca 92277
Resident ✓ Property owner ✓ Voter ✓

7- Margaret Synnott - MARGARET SYNNOTT
P.O. Box 1321 - 29 PALMS, CA. 92277
Property Owner - VOTER

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Dudley H Burton Print name Dudley H. BURTON
HC01 51 Box B
Address 70322 VALLE VISTA Rd. 29 Palms CAL. 92277
Resident ____ Property owner X Voter X
2. Signature Vera Yakes Print name VERA YAKES
Address HC01 Box 2164 71824 Old Chisholm TR 29 PALMS CALIF 92277
Resident X Property owner ____ Voter X
3. Signature Bernice E Burton Print name BERNICE E BURTON
70322 Valle Vista Rd
Address HCO 1, Box 151-B, 29 Palms, Ca. 92277
Resident ✓ Property owner ✓ Voter ✓
4. Signature Christine Cougar Print name Christine Cougar
Address 71824 Old Chisholm Trail
Resident X Property owner ____ Voter ____
5. Signature Debra George Print name DebRA George
Address 70720 Presswood 29 PALMS, CA 92277
Resident ✓ Property owner ✓ Voter ✓
6. Signature Janet Butler Print name Janet Butler
Address 85030 Eddie Albert - PO Bx 2256 - 29 Palms - CA 92277
Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to tbe use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Print name Denis Charpied
Address PO Box 321 Desert Center CA 92239
Resident X Property owner X Voter X
2. Signature Print name MARY L BURNS
Address 10909 JULIA St MIRA LOMA CA 91752
Resident X Property owner X Voter X
3. Signature Print name GLENN E. BAYLAN
Address P.O. BOX 107 DESERT CENTER CALIF. 92239
Resident ✓ Property owner____ Voter ✓
4. Signature Shirley M. Baylan Print name Shirley M. Baylan
Address P.O. Box 107, Desert Center, CA 92239
Resident ✓ Property owner____ Voter ✓
5. Signature Print name GARY LOPEZ
Address 5632 E. MISSION WAY Commerce CA 90040
Resident____ Property owner____ Voter ✓
6. Signature Print name____
Address 2323 Commerce Way Commerce CA 90040
Resident ✓ Property owner____ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Print name Joseph E. Blackburn
Address P.O. Box 492, Lancaster, CA 93584
Resident ✓ Property owner ✓ Voter ✓
2. Signature Stormy Williams Print name STORMY WILLIAMS
Address 3813 50th St W Rosamond Ca 93560
Resident____ Property owner ✓ Voter____
3. Signature Larry E. Taylor Print name LARRY E. TAYLOR
Address 1356 Beryl Ave, Mentone CA 92359
Resident ✓ Property owner ✓ Voter ✓
4. Signature Bonnie Pierce-Taylor Print name Bonnie Pierce-Taylor
Address 1356 Beryl Ave, Mentone CA 92359
Resident ✓ Property owner ✓ Voter ✓
5. Signature R. Lyle Talbot Print name R. Lyle Talbot
Address 633 W. Ave J-11 Lancaster CA 93534
Resident____ Property owner____ Voter____
6. Signature Print name Roland M. Valentine
Address POB 1051, Rosamond CA 93560
Resident____ Property owner ✓ Voter____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Susan Jean Frugé Print name SUSAN JEAN FRUGÉ
   Address 6945 Canyon Road, Twentynine Palms, CA 92277
   Resident Yes Property owner yes Voter Yes
2. Signature August Frugé Print name AUGUST FRUGE
   Address 6945 Canyon Rd - 29 Palms, CA 92277
   Resident Yes Property owner yes Voter yes
3. Signature Gracie Smiley Kasner Print name GRACIE SMILEY KASNER
   Address 7665 Alaba Ave., Yucca Valley, Calif. 92284
   Resident Yes Property owner Yes Voter Yes
4. Signature Frank J Kasner Print name FRANK J. Kasner
   Address 7665 Alaba Ave - Yucca Valley, CALIF. 92284
   Resident Yes Property owner yes Voter Yes
5. Signature Print name ESTHER L. HERBERT
   Address 6828 Canyon Road / P.O. Box 249, Twentynine Palms Ca. 92277
   Resident yes Property owner yes Voter yes.
6. Signature Arlene Lucas Print name ARLENE LUCAS
   Address 6738 Elk TRAIL - 29 Palms, Ca 92277
   Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

Prom: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Print name COLETTE ILLENGO
   Address P.O. Box 705 JOSHUA TREE, CA. 92252
   Resident x Property owner Voter x
2. Signature Kristie Jones Print name Kristie JONES
   Address P.O. BOX 705 Joshua Tree, Ca. 92252
   Resident ✓ Property owner Voter
3. Signature Print name
   Address
   Resident Property owner Voter
4. Signature Print name
   Address
   Resident Property owner Voter
5. Signature Print name
   Address
   Resident Property owner Voter
6. Signature Print name
   Address
   Resident Property owner Voter

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature____ Print name ANTHONY JUDE THORPE
   Address 2512 LEE AVE, COMMERCE, CALIF. 90040
   Resident____ Property owner ✓ Voter____
2. Signature CAMILO CADENAS Print name____
   Address 2272 FAIRGROUNDS COMMERCE CA. 90040
   Resident____ Property owner ✓ Voter____
3. Signature____ Print name____
   Address____
   Resident____ Property owner____ Voter____
4. Signature____ Print name Sean Cole
   Address 5321 Agnes Av #1 N. Hollywood CA 91607
   Resident ✓ Property owner____ Voter ✓
5. Signature Nicole A Kipp Print name Nicole Kipp
   Address 5321 Agnes Ave. #1 N. Hollywood, CA 91607
   Resident ✓ Property owner____ Voter ✓
6. Signature M. Pavnci Print name Peggy Pavnce
   Address 341 Chroton Glendale
   Resident ✓ Property owner____ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Alfredo Figueroa Print name Alfredo Figueroa
   Address 424 N. Carten St. Blythe Ca 92225
   Resident____ Property owner ✓ Voter____
2. Signature Jane Melanie Williams Print name JANE MELANIE WILLIAMS
   Address 3813 50th STREET WEST ROSAMOND, CA 93560
   Resident ✓ Property owner ✓ Voter ✓
3. Signature Tasha Glock Print name TASHA GLOCK
   Address 1365 E. 8th E. 8th Beaumont Ca 92223
   Resident____ Property owner____ Voter X
4. Signature Ray Kirkham Print name RAY KIRKHAM
   Address 7424 MORNINGSTAR RD. 2-546, 29 PALMS CA 92277
   Resident ✓ Property owner ✓ Voter ✓
5. Signature____ Print name____
   Address____
   Resident____ Property owner____ Voter____
6. Signature____ Print name____
   Address____
   Resident____ Property owner____ Voter____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature H P Anderson Print name H. P. ANDERSON
   Address 52425 Quailbrush Landers 92285
   Resident ✓ Property owner ✓ Voter ✓
2. Signature Louise Fordham Print name Louise Fordham
   Address P.O. Box 691 5111 Encelia Av. 29 Palms Cal.
   Resident X Property owner X Voter X
3. Signature Betty W Newman Print name BETTY W. NEWMAN
   Address HC 02, Box 546 · 29 Palms, CA 92277
   Resident X Property owner_____ Voter X
4. Signature Mark Crawford Print name MARK CRAWFORD
   Address 7020 UTAH TR 29 PALMS CA 92277
   Resident ✓ Property owner_____ Voter_____
5. Signature____________________ Print name____________________
   Address____
   Resident_____ Property owner_____ Voter_____
6. Signature____________________ Print name____________________
   Address____
   Resident_____ Property owner_____ Voter_____

DESERT RESIDENT AND PROPERTY OWNER PETITION

o: San Bernardino County Planning Department and all subsequent ecision-making bodies relative to the Rail Cycle Bolo Station andfill project and associated EIR/EIS (State Clearinghouse No. 1092020) for inclusion in the administrative record.

rom: Southern California desert area residents and property wners opposed to the use of our deserts as Metropolitan Area rash and garbage dumps.

ubject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT N ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the outhern California Desert do hereby request of the San ernardino County Planning Commission and all subsequent decision akers on the Rail-Cycle proposed Bolo Station Landfill pplications for permits, and Bureau of Land Management land ransfers that this project be denied in all the forms suggested n the EIR/EIS.

Projects such as Bolo Landfill would foul our desert nvironment irreparably with trash, garbage, and water and air ollution. It would set a precedent of Metropolitan Area ominance over the interests of the Desert Communities and would ndoubtedly be followed by other similar projects.

. Signature Jeane L Casper Print name JEANE L. CASPER
  Address 7758 North Star, 29 Palms Ca 92277
  Resident ✓ Property owner_____ Voter ✓
. Signature Fred Gerletti Print name FRED GERLETTI
  Address 72341 29 PALMS HWY 29 PALMS, CA
  Resident X Property owner X Voter X
. Signature Wanda Bowlus Print name WANDA Bowlus
  Address 73289 Summit Dr 29 Palms CA
  Resident X Property owner X Voter X
. Signature John Clingman Print name John CLINGMAN
  Address 6556 Cholla 29 Palms Ca 92277
  Resident X Property owner_____ Voter_____
. Signature Jean Rich Print name JEAN RICH
  Address HC01 BOX 133-70817 INDIAN TRAIL-29 PALMS, CA 92277
  Resident ✓ Property owner ✓ Voter ✓
. Signature B Bridgeman Print name BRIDGEMAN
  Address 6058 Singing Sands Rd 29 Palms Ca 92277
  Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-9

1. Signature Rosaleen Mangels Print name ROSALEEN MANGELS
Address HC-2 Box 452 3880 Playa Rd - 29 Palms, Ca 92277
Resident____Property owner ✓ Voter____
2. Signature [illegible] Print name MARALYN de GRAAFF
Address [illegible] 29 [illegible] - 92277
Resident____Property owner____Voter____
3. Signature Hallie Pernod Print name Hallie Pernod
Address 76625 Garden Rd. 29 Palms, Ca. 92277
Resident____Property owner____Voter____
4. Signature [illegible] Print name Adolph M. Quamma
Address 86856 Amboy Rd HC02 Box 435D 29 Palms 92277
Resident ✓ Property owner ✓ Voter ✓
5. Signature____Print name____
Address____
Resident____Property owner____Voter____
6. Signature____Print name____
Address____
Resident____Property owner____Voter____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Louise B. Early Print name LOUISE B. EARLY
Address 74388 Maricopa Dr., 29 Palms Ca. 92277
Resident ✓ Property owner ✓ Voter ✓
2. Signature [illegible] Print name J. D. CONKLIN
Address 85578 HWY 62 - 29 PALMS Ca 92277
Resident ✓ Property owner____Voter ✓
3. Signature [illegible] Print name IRENE CHARLTON
Address 73959 Cottonwood [illegible] - 29 Palms · 92277
Resident ✓ Property owner ✓ Voter ✓
4. Signature Leon Royse Print name LEON ROYSE
Address 6363 [illegible] Ave 29 Palms Cal 92277
Resident ✓ Property owner____Voter ✓
5. Signature Daniel J Blaul Print name DANIEL J BLAUL
Address 6726 BERMUDA AVE 29 PALMS CA 92277
Resident X Property owner X Voter X
6. Signature Astrid Marianne Blaul Print name ASTRID MARIANNE BLAUL
Address 6726 BERMUDA AVE. 29 Palms CA 92277
Resident X Property owner X Voter X

2.6-10

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Jesse Burke Print name JESSE BURKE
   Address H.C02 Box 346-82728 Valle Vista, 29 Palms 92277
   Resident ✓ Property owner X Voter X
2. Signature Alta E. Burke Print name ALTA E. BURKE
   Address HC02 Box 346 82728 VALLE VISTA 29 PALMS 92277
   Resident ✓ Property owner ✓ Voter ✓
3. Signature Ida B. Colaw Print name Ida B Colaw
   Address 6111 Colaw Rd. P.O. Box 934-29 Palms, CA 92277
   Resident ✓ Property owner ✓ Voter ✓
4. Signature____ Print name____
   Address____
   Resident____ Property owner____ Voter____
5. Signature____ Print name____
   Address____
   Resident____ Property owner____ Voter____
6. Signature____ Print name____
   Address____
   Resident____ Property owner____ Voter____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Frances J. Edwards Print name Frances J. Edwards
   Address HC02 Box 446 87574 Amboy Rd. 29 Palms, Ca. 92277
   Resident ✓ Property owner ✓ Voter ✓
2. Signature George N. Edwards Print name George N. Edwards
   Address HC02 Box 446 87574 Amboy Rd. 29 Palms, Ca. 92277
   Resident ✓ Property owner ✓ Voter ✓
3. Signature C. Joan Daisy Print name C. Joan DAISY
   Address 82364 Virginia Rd HC02 Box 342C 29 Palms, Calif 92277
   Resident ✓ Property owner ✓ Voter —
4. Signature Don Daisy Print name Don DAISY
   Address 82364 Virginia Rd HC02 Box 342C 29 Palms
   ~~Resident~~ ~~Property owner~~ ~~Voter~~
5. Signature Antoinette Mozzetti Print name antoinette Mozzetti
   Address HC02-Box 344C/ [illegible] 29 Palms ca.
   Resident ✓ Property owner ✓ Voter ✓
6. Signature agostino mozzetti Print name agostino Mozzetti
   Address HC02-Box 344C/ [illegible] 29 Palms co.
   Resident ✓ Property owner ✓ Voter ✓

082

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Nick Amorocchi Print name Nick Amorocchi
Address 4460 Barbara Lane HC02-Box 344E. 29 Palms, Cal,
Resident ✓ Property owner ✓ Voter ✓
2. Signature June M. Hill Print name June N. Hill
Address 84440 Hill Rd -2-399
Resident ✗ Property owner ✗ Voter ✗
3. Signature_____ Print name_____
Address_____
Resident_____ Property owner_____ Voter_____
4. Signature_____ Print name_____
Address_____
Resident_____ Property owner_____ Voter_____
5. Signature_____ Print name_____
Address_____
Resident_____ Property owner_____ Voter_____
6. Signature_____ Print name_____
Address_____
Resident_____ Property owner_____ Voter_____

DOCUMENT 082
PETITIONS - COMMITTEE FOR PROTECTION OF RURAL INDEPENDENCE
RESPONSE TO COMMENTS

Response 082-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

2.6-13

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature B.K. Wiederhold Print name B.K. WIEDERHOLD
   Address 7076 CANYON RD HCO-1 BOX 512 29 PALMS, CA 92277
   Resident ✓ Property owner ✓ Voter ✓
2. Signature Paula Greene Print name PAULA GREENE
   Address 73423 DESERT TRAIL 29 PALMS CA 92277
   Resident ✓ Property owner ✓ Voter ✓
3. Signature Pedro M. Torres Print name PEDRO MARCIAL TORRES
   Address P.O. Box 2038 29 PALMS CAL. 92277
   Resident ✓ Property owner ____ Voter ✓
4. Signature Leonard Thompson Print name LEONARD THOMPSON
   Address HC02 BOX 352
   Resident ✓ Property owner ✓ Voter ✓
5. Signature John R. Culley Sr. Print name JOHN R. CULLEY, SR.
   Address HC02 BOX 303B 29 Palms, Ca 92277
   Resident ____ Property owner ✓ Voter ✓
6. Signature Harriet E. Lindsey Print name HARRIET E LINDSEY
   Address HC02 Box 365 29 Palms Ca 92277
   Resident ✓ Property owner ✓ Voter ✓

Sent by: Mrs. Vera Ciborowski
HCO-2-BX326Z
81371- Garden Rd. WV
Twentynine Palms, CA 92277

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Flora Chose Print name Flora Chose
   Address 7630 Acoma Trl Yucca Vly
   Resident X Property owner ____ Voter X
2. Signature Ina M Goodridge Print name INA M GOODRIDGE
   Address 5309 LARPEA Rd - Johnson Valley
   Resident ✓ Property owner ✓ Voter ✓
3. Signature Betty Pope Print name BETTY POPE
   Address 49073 MOJAVE Dr MORONGO VALLEY 92256
   Resident ✓ Property owner ✓ Voter ✓
4. Signature Bonnie Trezona Print name Bonnie TREZONA
   Address 1078 Old Woman Spgs Landers CA
   Resident ____ Property owner ✓ Voter ✓
5. Signature Henry Barter Print name HENRY BARTER
   Address 8072 W 4424 - LINDA LEE YUCCA VALLEY
   Resident ____ Property owner ____ Voter ____
6. Signature Print name W CAMPBELL
   Address 5508 Luna Vista Yucca Valley
   Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Geraldine Peace Print name Geraldine PEACE
   Address HC02 Box 34CB-4199 Wilson Rd. 29 Palms Ca 92277
   Resident — Property owner — Voter —
2. Signature John Peace Print name JOHN PEACE
   Address HC02 Box 34CB. 4199 WILSON RD-29 PALMS, CA 92277
   Resident ✓ Property owner ✓ Voter ✓
3. Signature Winifred L Clark Print name Winifred L. Clark
   Address HC02-Box 331 - 81151 Stardune 29 Palms California - 92277
   Resident ✓ Property owner ✓ Voter ✓
4. Signature Donald R Malone Print name Donald R Malone
   Address 81636 Garden Rd 29 Palms Wonder Valley
   Resident ✓ Property owner ✓ Voter ✓
5. Signature Wanda Malone Print name Wanda Malone -
   Address 81636 Garden Rd. Wonder Valley 29 Palms -
   Resident ____ Property owner ____ Voter ____
6. Signature Margaret Malone Print name Margaret Malone
   Address 4775 Wilson Wonder Valley 29 Palms -
   Resident ____ Property owner ✓ Voter ____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Lida L. Secrest Print name LIDA L. SECREST
   Address P.O. BOX 853 JOSHUA TREE, CALIF. 92252
   Resident ____ Property owner ____ Voter ____
2. Signature Eugene J. Hickle Print name EUGENE J. HICKLE
   Address 5375 JADE LANE - 29 PALMS - WONDER VALLEY
   Resident ✓ Property owner ✓ Voter ✓
3. Signature Francis L Brakeley Print name Francis L. Brakeley
   Address HC02 Box 353 29 Palms Ca. - 92277
   Resident ✓ Property owner ____ Voter ✓
4. Signature Victoria M. Stambaugh Print name Victoria M. Stambaugh
   Address 8608 Frontera Ave, Yucca Valley CA 92284
   Resident ✓ Property owner ✓ Voter ✓
5. Signature Karen Kupcha Print name Kupcha, Karen
   Address 58230 Pueblo Trail
   Resident ✓ Property owner ✓ Voter ✓
6. Signature John Thurman Print name JOHN THURMAN
   Address 7344 AVALON AVE. YUCCA Valley
   Resident ✓ Property owner ____ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Carol J. Anderson Print name Carol J. Anderson
Address HC02-Box 370 83401 Amboy, 29 Palms Calif. 92277
Resident — Property owner ✓ Voter ✓
2. Signature Deborah Paresa Print name Deborah + GREGORY PARESA
Address HC02 Box 449A - 87627 Amboy Rd 29 Palms Calif 92277
Resident X Property owner X Voter X
3. Signature Rosaleen M. Mangels Print name ROSALEEN M. MANGELS
Address HC-2 Box 452 3850 Phreya Rd - 29 Palms, Ca 92277
Resident Yes Property owner Yes Voter yes
4. Signature Janet P. Herrell Print name Janet P. Herrell
Address HC02 Box 341-H 4625 Sandy LN 29 PALMS CA. 92277
Resident ✓ Property owner ✓ Voter ✓
5. Signature Elizabeth Campbell Print name Elizabeth Campbell
Address PO Box 998, 29 Palms Ca 92277
Resident ✓ Property owner ✓ Voter ✓
6. Signature Dorothy Dickey Print name Dorothy Dickey
Address 4561 Adobe Rd Sp 8 29 Palms, 92277
Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Kenneth Propst Print name KENNETH PROPST
Address 79688 Warner Dr, 29 PALMS, CA. 92277
Resident X Property owner X Voter X
2. Signature Florence Connor Print name FLORENCE CONNOR
Address 83683 Amboy Rd 29 PALMS, CA. 92277
Resident ✓ Property owner ✓ Voter ✓
3. Signature Paul F. Kercher Print name PAUL F. KERCHER
Address 79688 Queen Anne Dr. 29 PALMS, CA. 92277
Resident ✓ Property owner ✓ Voter ✓
4. Signature Richard Walters Print name F. R. WALTERS
Address HCO-2 BOX 375 29 PALMS, CA. 92277
Resident ✓ Property owner ✓ Voter ✓
5. Signature Casey A Davis Print name Casey A Davis
Address 7504 Persia Ave 29 Palms, 92277
Resident X Property owner X Voter X
6. Signature Reta McCartney Print name RETA McCARTNEY
Address 80053 Indian Trail 29 PALMS, 92277
Resident X Property owner X Voter X

083

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Bernice Propst Print name BERNICE PROPST
   Address 79688 Warner Dr. 29 PALMS, CA, 92277
   Resident ✓ Property owner ✓ Voter ✓
2. Signature Edna Adams Print name Edna adams
   Address HC02, Box 336 81118 Didsbury Rd - 29 Palms, Ca 92277
   Resident X Property owner X Voter X
3. Signature Joseph Ciborowski Print name JOSEPH CIBOROWSKI
   Address HC02 Box 326 Z. 29 PALMS 92277
   Resident ✓ Property owner ✓ Voter ✓
4. Signature Vera Ciborowski Print name VERA-CIBOROWSKI
   Address HC0-2-BOX 326Z 29 PALMS, CA. 92277
   Resident ✓ Property owner ✓ Voter ✓
5. Signature Anita B Short Print name ANITA B SHORT
   Address 8989 Utah Trail, 29 Palms CA 92277
   Resident ✓ Property owner ____ Voter ✓
6. Signature Andrew Ciborowski Print name ANDREW CIBOROWSKI
   Address HC0#2 Box 326 Z, 81371 Grapew Rd, 29 Palms, CA, 92277
   Resident ✓ Property owner ____ Voter ✓

DOCUMENT 083
DESERT RESIDENT AND PROPERTY OWNER PETITION
RESPONSE TO COMMENTS

Response 083-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

2.6-19

084

MAR 1993

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Ann M. Denslow Print name Ann M. Denslow
Address 73390 El Paseo Dr. 29 Palms Ca 92277
Resident X Property owner X Voter X
2. Signature Maryann Downs Print name Maryann Downs
Address 67164 Estrella Ave 29 Palms Ca 92277
Resident X Property owner X Voter ____
3. Signature Elizabeth Moore Print name ELIZABETH A. MOORE
Address 5384 BAILEYA AVE. 29 PALMS, CA. 92277
Resident ____ Property owner ____ Voter ____
4. Signature John W. Adam Print name John W. Adam
Address 60624 Natoma Trail Joshua Tree, Ca. 92252
Resident X Property owner ____ Voter X
5. Signature Gerald W. Eller Print name Gerald W. Eller
Address 7081-B, Mesquite Ct 29 Palms CA 92278
Resident X Property owner ____ Voter X
6. Signature ____ Print name ____
Address ____
Resident ____ Property owner ____ Voter ____

Sent from: Gerald W. Eller
7081-B Mesquite Ct.
Twenty Nine Palms, CA 92277

084

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Randi Wilson Print name [illegible]
Address 2120 [illegible] Ln 29 Palms
Resident ____ Property owner ____ Voter X
2. Signature ____ Print name ____
Address ____
Resident ____ Property owner ____ Voter ____
3. Signature ____ Print name ____
Address ____
Resident ____ Property owner ____ Voter ____
4. Signature ____ Print name ____
Address ____
Resident ____ Property owner ____ Voter ____
5. Signature ____ Print name ____
Address ____
Resident ____ Property owner ____ Voter ____
6. Signature ____ Print name ____
Address ____
Resident ____ Property owner ____ Voter ____

DOCUMENT 084
DESERT RESIDENT AND PROPERTY OWNER PETITION
RESPONSE TO COMMENTS

Response 084-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

FEB 1995
RECEIVED
BY

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-21

1. Signature Donna L. Fox Print name Donna L. Fox
Address 6989 [illegible] Star Ave. 29 Palms
Resident X Property owner ____ Voter X

2. Signature Phillip E Murray Print name Phillip E Murray
Address 31274 Freya Dr Redlands Ca
Resident ____ Property owner X Voter X

3. Signature Mary Stacy Print name Mary Stacy
Address 6949 North Star Avenue
Resident X Property owner X Voter X

4. Signature Roy Young Print name ROY YOUNG
Address 6630 ADOBE RD 29 PALMS CA
Resident ✓ Property owner ____ Voter ____

5. Signature Print name Joseph M. Angel
Address 8101 D Delta MCB 92278
Resident X Property owner ____ Voter ____

6. Signature Benjamin C. Hicks Print name Benjamin C Hickin
Address 8775 Carbona Trail, Morongo Valley, CA
Resident ✓ Property owner ✓ Voter ____

HSUS
Donna L Fox
6989 N Star Ave
Twentynin Plm CA 92277-3723

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Sheila Greiser Print name Sheila Greiser
Address 71960 Sunnyslope Dr 29 Palms CA
Resident — Property owner X Voter ____

2. Signature Print name PATRICIA K JENSEN
Address 61730 Alta Vista Joshua Tree CA
Resident ✓ Property owner ✓ Voter ✓

3. Signature Eric Beck Print name ERIC BECK
Address 7096 Quail Springs Av 29 Palms CA 92277
Resident ✓ Property owner ✓ Voter ✓

4. Signature Melissa Vincent Print name MELISSA VINCENT
Address 73843 Sunnyvale #21 29 Palms
Resident ✓ Property owner ____ Voter ✓

5. Signature William D Young Print name William D Young
Address 6563 Oasis #1 29 Palms
Resident ✓ Property owner ____ Voter ✓

6. Signature Stacy J Gregg Print name STACY J GREGG
Address 6161 Ocotillo #22 29 Palms
Resident ✓ Property owner ____ Voter ____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Andy Simo Print name Andy Simo
Address HC 2 Box 263 Apt E 29 Palms CA
Resident X Property owner ____ Voter X

2. Signature Jackie M. Carter Print name JACKIE M CARTER
Address 72474 DESERT TRAIL
Resident X Property owner X Voter X

3. Signature Joan C Carter Print name ____
Address 72474 Desert Trail
Resident X Property owner X Voter X

4. Signature John L Murdock Jr. Print name JOHN L MURDOCK JR
Address 74858 MORNING DR 29 PALMS CA 92277
Resident ✓ Property owner ✓ Voter ✓

5. Signature W.J. Cartwright Print name W.J. CARTWRIGHT
Address 56593 ONAGA TRAIL YUCCA VALLEY CA 92284
Resident ✓ Property owner ____ Voter ✓

6. Signature Mark Weisberg Print name MARK WEISBERG
Address PO BOX 2405 YUCCA VALLEY, CA 92286
Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Linda Simo Print name LINDA SIMO
Address HC 2 Box 263 29 Palms CA
Resident ✓ Property owner ____ Voter ✓

2. Signature [illegible] Print name Jeremy [illegible]
Address 5500 [illegible] Apt D 29 Palms
Resident ✓ Property owner ____ Voter ____

3. Signature [illegible] Print name [illegible]
Address 6330 Yucca Ave 29 Palms Cal 92277
Resident ✓ Property owner ____ Voter ✓

4. Signature Edlinda Serianni Print name Edlinda Serianni
Address 6668 Eucalyptus Ave 29 palms CA 92277
Resident ✓ Property owner ____ Voter ✓

5. Signature Marilyn Wellinger Print name MARILYN WELLINGER
Address 8084 #A Sandhill 29 Palms Ca. 92278
Resident ✓ Property owner ____ Voter ____

6. Signature [illegible] Print name T.W. [illegible]
Address 4709 Flying H Rd 29 Palms, Ca
Resident ____ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-23

1. Signature Barbara Murphy Print name BARBARA MURPHY
Address 3936 Alpine Ave. 29 Palms, CA 92277
Resident X Property owner X Voter X
2. Signature Print name THURMAN CARSON
Address 3680 BLUEGRASS 29 PALMS CALIF. 92277
Resident X Property owner X Voter X
3. Signature Libby P. Wookey Print name LIBBY P. WOOKEY
Address 6645 Via Allegra 29 Palms Ca. 92277
Resident X Property owner ____ Voter ____
4. Signature Evelyn Bain Print name EVELYN BAIN
Address 6645 mesquite ave 29 Palms Ca 92277
Resident X Property owner X Voter X
5. Signature Lois D. Hammaway Print name LOIS HAMMAWAY
Address 6645 mesquite av 29 Palms Ca 92277
Resident X Property owner ____ Voter X
6. Signature Barbara R. Bain Print name BARBARA R BAIN
Address 6645 mesquite ave 29 Palms Ca 92277
Resident X Property owner X Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Print name JAINTE ROJAS
Address PSC 35-173 FDM 29 PALMS CA 92278
Resident X Property owner ____ Voter ____
2. Signature Print name DAVID W HARTY SR
Address 8103A DELTA ST MCB 29 PALMS, CA 92278
Resident X Property owner X Voter X
3. Signature Print name Tonya Polsca
Address 6375 Cahuilla Ave 29 Palms Ca 92277
Resident X Property owner ____ Voter X
4. Signature Connie Drake Print name CONNIE DRAKE
Address 6660 Lupine 29 Palms Ca.
Resident X Property owner X Voter X
5. Signature Cynthia Stoddard Print name Cynthia Stoddard
Address PO Box N-741 29 Palms CA 92277
Resident X Property owner X Voter ____
6. Signature Gail Careaga Print name GAIL CAREAGA
Address HC-01 Box 425 JOSHUA TREE CA 92252
Resident X Property owner ____ Voter X

2.6-24

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature ______ Print name Steve Van Brasch
Address 57468 St Mary's Dr. Yucca Valley Ca 92284
Resident ✓ Property owner ______ Voter ✓
2. Signature ______ Print name JAMES GOSAIN
Address HC0 2 - BOX 527-3
Resident ✓ Property owner ✓ Voter YES
3. Signature Lisa North Print name LISA North
Address 7239 Rubidoux Ave YV.
Resident ✓ Property owner ✓ Voter yes
4. Signature Maria Eldred Print name Maria Eldred
Address 6266 Ave Juan Diaz
Resident ✓ Property owner ✓ Voter ✓
5. Signature ______ Print name Gerald M Eldred
Address 6266 AVE Juan Diaz
Resident ✓ Property owner ______ Voter ✓
6. Signature Stephen B. Warren Print name Stephen B. Warren II
Address 7005 North Star Ave
Resident ✓ Property owner ______ Voter ______

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature arthur S Cole Print name ARTHER S COLE
Address MWSS 173 29 PALMS CA. 92278
Resident ______ Property owner ______ Voter ✓
2. Signature gerald E gunn Print name Gerald E Gunn
Address MWSS-173 29 Palms CA 92278
Resident ✓ Property owner ______ Voter ______
3. Signature ______ Print name Jennifer H Gilbert
Address MWSS 173 29 Palms Ca. 92278
Resident ______ Property owner ______ Voter ✓
4. Signature Raul ______ Print name Raul Quinones
Address MWSS 173 29Palms CA 92278
Resident ______ Property owner ______ Voter ✓
5. Signature Bernard Dale Print name Bernard Dale
Address MWSS 173 comm 29 Palms, CA 92278
Resident ______ Property owner ______ Voter ______
6. Signature ______ Print name FLOYD R RIVERS
Address MWSS 173 29 PALMS CA 92278
Resident X Property owner ______ Voter ______

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-25

1. Signature Don Print name Don Lanier
Address 9950 E SR Rd Stockton Calif
Resident ___ Property owner X Voter X
2. Signature Ellys Clark Print name Ellys Clark
Address 6319 Tamarisk Ave 29 PALMS - CA 92277.
Resident ✓ Property owner ___ Voter ___
3. Signature Macy Print name Teresa C. Maicy
Address 15577 B Gayle Hill 29 Palms Ca 92218
Resident ✓ Property owner ___ Voter ✓
4. Signature ___ Print name R Guzman
Address 6611 Sunrise Rd. 29 PALMS CA 92277
Resident ✓ Property owner ✓ Voter ✓
5. Signature Carol Marie Metzger Print name Carol Marie Metzger
Address 6230 Mojave Ave, 29 Palms
Resident ✓ Property owner ✓ Voter ✓
6. Signature ___ Print name ___
Address 6690 Bizzy Lane HC1 Box 314 Joshua Tree
Resident ✓ Property owner ___ Voter ___

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Ursula Anackissen Print name Ursula Anackissen
Address 6989 Elm Ave 29 Palms Cal 92277
Resident X Property owner ___ Voter ✓
2. Signature Kathleen Lien Print name KATHLEEN LIEN
Address 6990 ELM AVE 29 PALMS CA 92277
Resident ✓ Property owner X Voter X
3. Signature Stanley Print name Stanley Vincent Lien
Address 6990 Elm Ave 29 Palms CA-92277
Resident X Property owner X Voter X
4. Signature Joyce Nalley Print name Joyce Nalley
Address 6842 Alpine Ave 29-Palms CA 92277
Resident ✓ Property owner ✓ Voter ✓
5. Signature Cheri Copeland Print name Cheri Copeland
Address HC02-744 6316 ISLETA 29 PALMS CA
Resident ✓ Property owner ___ Voter X
6. Signature Carrie Darlene Hall Print name DARLENE Hall
Address P.O. Box 1984, 29 PALMS, CA. 92277
Resident ✓ Property owner X Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environmeot irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature William Jones Print name William Jones
Address 75272 Mayfair Dr. 29 Palms CA 92277
Resident ____ Property owner ✓ Voter ____
2. Signature [illegible] Print name James Jones
Address 5868 Mariposa 29 Palms, CA 92277
Resident ✓ Property owner ____ Voter ____
3. Signature Ralph C. Toliver Print name RALPH C TOLIVER
Address 7007 ELM AVE. 29 PALMS, CA 92277
Resident X Property owner ____ Voter X
4. Signature Frank R. Schultz Print name FRANK R. SCHULTZ
Address 7014 ELM AVE 29 PALMS CA 92277
Resident X Property owner X Voter X
5. Signature Rodney R. Stricker Print name R.D STRICKER
Address 6989 ELM AVE 29 PALMS, CA 92277
Resident X Property owner X Voter X
6. Signature Laura Stricker Print name LAURA Stricker
Address 6989 Elm Ave. 29 Palms, CA.
Resident X Property owner X Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Kathy Holloway Print name KATHY HOLLOWAY
Address 75301 Mesa Rd. 29 Palms
Resident ✓ Property owner ✓ Voter ✓
2. Signature [illegible] Print name [illegible]
Address [illegible]
Resident ✓ Property owner ✓ Voter ✓
3. Signature Ray Ornelas Print name RAY ORNELAS
Address 72915 Homestead Rd. 29 Palms
Resident ✓ Property owner ✓ Voter ✓
4. Signature Frances Cervantes Print name FRANCES CERVANTES
Address 4102 Box 352B
Resident ✓ Property owner ✓ Voter ✓
5. Signature Kazue Adams Print name KAZUE ADAMS
Address 5799 [illegible] 29 PALMS
Resident X Property owner X Voter ____
6. Signature MATTHEW D WALTON Print name Matthew D. Walton
Address 61045 Navajo Tr. Joshua Tree, CA 92252
Resident X Property owner ____ Voter ____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature____ Print name [illegible]
   Address 6355 Palo Verde.
   Resident ✓ Property owner____ Voter____
2. Signature Audrey Morning Print name AUDREY MORNING
   Address 7036 Quail Springs Ave.
   Resident ' Property owner ✓ Voter____
3. Signature Marlys A Peterson Print name MARLYS A PETERSON
   Address PO Box 476, 29 Palms CA 92277
   Resident ✓ Property owner ✓ Voter ✓
4. Signature Bill C Coy Print name BILL C COY
   Address 7443 Morning Dr, 29 Palms CA
   Resident ✓ Property owner ✓ Voter ✓
5. Signature Alfredo Marr Print name Alfredo MARR
   Address 6603 Desert Quail Dr., 29 Palms 92277
   Resident ✓ Property owner ✓ Voter ✓
6. Signature JB Carrol Print name J.B CARROL
   Address 6006 Caravan Rd
   Resident X Property owner X Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Rev Timothy W Elisson Print name Timothy Elisson
   Address 6959 N. Star Ave. 29 Palms
   Resident ✓ Property owner____ Voter ✓
2. Signature Dale R Wade Print name DALE WADE
   Address 7153 Elm Rd
   Resident yes Property owner no Voter yes
3. Signature____ Print name Ken Sales
   Address 7013 North Star 29 palms
   Resident ✓ Property owner ✓ Voter ✓
4. Signature Edward Lysher Print name Edward C Lysher
   Address 82181 Carey Rd HC02 Box 344-H 29 Palms Ca 92277
   Resident ✓ Property owner ✓ Voter ✓
5. Signature Chuck O'Connor Print name CHUCK O'CONNOR
   Address 6878 Eucalyptus Ave 29 Palms CA
   Resident ✓ Property owner X Voter X
6. Signature Eddie Lysher Print name Eddie Lysher JR
   Address 82181 Carey Rd HC02 Box 344-H 29 Palms, Ca 92277
   Resident ✓ Property owner____ Voter____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Opal D. Coyle Print name OPAL COYLE
Address 5954 MORONGO RD 29 PALMS CA.
Resident ✓ Property owner ____ Voter ✓
2. Signature Charles W. Fox Print name Charles W. FOX
Address 6989 North Star Ave 29 Palms CA 92277
Resident ✓ Property owner ____ Voter ✓
3. Signature ____ Print name MaJack SMITH
Address 6963 49 Palms Ave
Resident ✓ Property owner ✓ Voter ✓
4. Signature Terry Thomas Print name Terry Thomas
Address 74049 Casita 29 palms Ca. 92277
Resident ✓ Property owner ____ Voter ____
5. Signature Dave Underwood Print name DAVE UNDERWOOD
Address 6940 NorthStar 29 Palm's
Resident ✓ Property owner ✓ Voter ✓
6. Signature Veta Underwood Print name VETA UNDERWOOD
Address 6940 No. Star 29 Palms
Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Joseph Huber Print name JOSEPH HUBER
Address 7967 Joshua Lane Yucca valley
Resident ✓ Property owner ✓ Voter ✓
2. Signature John A. McClure Print name JOHN A. MCCLURE
Address 58735 Campero DR. Yucca Valley
Resident ✓ Property owner ____ Voter ____
3. Signature Terry Holland Print name TERRY HOLLAND
Address 63175 SUNNYSANDS JOSHUA TREE CA.
Resident X Property owner X Voter ____
4. Signature Chad Holland Print name Chad Holland
Address 63175 Sunny Sands Joshua Tree CA.
Resident ____ Property owner ____ Voter ____
5. Signature Carl J. Davies Print name Carl Joseph Davies
Address 4343 Reptow Rd. Landers Ca. 92284
Resident X Property owner X Voter X
6. Signature Robert E. Garrett Print name ROBERT E. GARRETT
Address 54720 SANDY WAY, YUCCA VALLEY, CA. 92284
Resident X Property owner ____ Voter ____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Anthony Wells Print name Anthony Wells
   Address 7200 Lomita Rd. Joshua Tree
   Resident ✓ Property owner ✓ Voter ✓
2. Signature Print name DANIEL J FRIEND
   Address PO BOX 256 JOSHUA TREE CA.
   Resident X Property owner ____ Voter X
3. Signature Paul Friend Print name Paul Friend Jr.
   Address PO BOX 250
   Resident X Property owner ____ Voter X
4. Signature Print name Stewart Gardner
   Address 60162 Lathan Tr Joshua Tree CA.
   Resident X Property owner X Voter ____
5. Signature Steve Rivera Print name STEVE RIVERA
   Address 59125 Douglas LN
   Resident X Property owner X Voter ____
6. Signature Al Nielson Jr Print name A.R. Nielson Jr.
   Address 57557 Sunnyslope Yucca Valley, Ca 92284
   Resident X Property owner ____ Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Sonia Pica Print name SONIA PICA
   Address 2370 BLUEGRASS - HC01 #149
   Resident X Property owner X Voter X
2. Signature [illegible] Print name [illegible]
   Address [illegible] St
   Resident yes Property owner [illegible] Voter yes
3. Signature Richard Lee Curry Print name Richard Lee Curry
   Address 5125 Indio ave Yucca Valley, Ca
   Resident Yes Property owner Yes Voter Yes
4. Signature Gary Swanner Print name GARY Swanner
   Address 9633 Navajo Morongo VLY. Ca. 92256
   Resident YES Property owner NO Voter YES
5. Signature Merilyn Wood Print name MERLYN WOODY
   Address 6789 PRESCOTT Yucca Valley
   Resident YES Property owner NO Voter YES
6. Signature Print name R. J. [illegible]
   Address [illegible] Creek Tr. / Y.V. Ca 92284
   Resident ____ Property owner ____ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Print name WILLARD E. FLAHERTY
   Address 56641 Zuni TRL
   Resident X Property owner____ Voter X
2. Signature Print name Betty P FLAHERTY
   Address 56641 Zuni TR
   Resident ✓ Property owner____ Voter X
3. Signature David L. Mahaffey Print name DAVID L MAHAFFEY
   Address 58313 Delano TR
   Resident X Property owner X Voter X
4. Signature Armando Alvarez Print name____
   Address 56041 Buena Vista Yucca Valley
   Resident NO Property owner X Voter X
5. Signature Joyce Alvarez Print name Joyce Alvarez
   Address 56041 Buena Vista Yucca Valley
   Resident NO Property owner X Voter X
6. Signature Jay Isaacs Print name JAY ISAACS
   Address 7646 DEER TRAIL YUCCA VALLEY
   Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature [illegible] Print name [illegible]
   Address [illegible] Cal.
   Resident ✓ Property owner____ Voter ✓
2. Signature [illegible] Print name [illegible]
   Address 71465 BARBERRY AVE YUCCA VALLEY, CA 92284
   Resident ✓ Property owner ✓ Voter ✓
3. Signature [illegible] Print name [illegible]
   Address [illegible] VALLEY [illegible]
   Resident ✓ Property owner ✓ Voter ✓
4. Signature [illegible] Mallett Print name CHARLES [illegible] MALLETT
   Address 57254 29 palms Hwy. #7
   Resident X Property owner X Voter X
5. Signature [illegible] Print name [illegible]
   Address [illegible]
   Resident ✓ Property owner ✓ Voter ✓
6. Signature David P Maresh Print name David P Maresh
   Address 56593 Zuni Trail Yucca Valley CA 92284
   Resident x Property owner x Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-31

1. Signature [illegible] Print name [illegible]
Address 6911 [illegible] Ave
Resident / Property owner_____ Voter X
2. Signature [illegible] Murray Print name DENA A MURRAY
Address 6911 [illegible] STAR AVE
Resident X Property owner_____ Voter X
3. Signature [illegible] Print name [illegible]
Address_____
Resident \ Property owner_____ Voter X
4. Signature Kelli Murphy Print name_____
Address 6856 El Sol Ave
Resident X Property owner X Voter X
5. Signature Colleen Kalust Print name Colleen Kalust
Address 6B Gold Dr, 29 Palms
Resident X Property owner_____ Voter ✓
X. Signature ~~Colleen Kalust~~ Print name_____
Address_____
Resident_____ Property owner_____ Voter_____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Mary Mikolcik Print name MARY MIKOLCIK
Address 74576 Sunrise 29 Palms Ca 92277
Resident X Property owner_____ Voter_____
2. Signature Robert Lucas Print name Robert LUCAS
Address 74576 Sunrise 29 Palms Ca 92277
Resident X Property owner_____ Voter_____
3. Signature Marsha Williams Print name MARSHA WILLIAMS
Address P.O. Box 2026 (6175 COLAW) 29 PALMS, CA 92277
Resident X Property owner X Voter X
4. Signature Ruth Amorose Print name RUTH AMOROSE
Address [illegible] 5406 MORONGO Rd.
Resident X Property owner X Voter X
5. Signature Kathy Perdue Print name KATHY PERDUE
Address 6608 Morongo Rd. 29 Palms Ca. 92277
Resident X Property owner X Voter X
6. Signature Stacey Moore Print name STACEY MOORE
Address 73747 Raymond DR #3
Resident X Property owner_____ Voter_____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Michael A Snyder Print name Michael A. SNYDER
Address 7370 SHERMAN Hoyt
Resident X Property owner X Voter ____
2. Signature Irene Rowland Print name ____
Address 72232 Sunnyslope Ave
Resident X Property owner ____ Voter X
3. Signature Valene S Lyons Brady Print name Valene S Lyons-Brady
Address 78569 29 Palms Hwy 29 Palms
Resident ✓ Property owner ____ Voter ✓
4. Signature Dorothy G Leftridge Print name Dorothy G. Leftridge
Address 73223 Sunnyvale Dr. 29 Palms
Resident ✓ Property owner ✓ Voter ✓
5. Signature Bennie D Coffman Print name Bennie D. Coffman
Address 74451 MARICOPA DR 29 Palms
Resident ✓ Property owner ____ Voter ✓
6. Signature Frank V Alessi Print name FRANK V. ALESSI
Address 2nd LAI BN. 29
Resident ____ Property owner ____ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Cindy Clark Print name CINDY CLERK
Address PO Box 2816, 29 PALMS, CA 92277
Resident ✓ Property owner ____ Voter ✓
2. Signature Michael Bayes Print name Michael Bayes
Address P.O.B. 1100 Joshna Tree Calif. 92252
Resident X Property owner X Voter X
3. Signature Leslie Rotstein Print name Leslie Rotstein
Address Po Box 638 Morongo Valley Ca 92256
Resident X Property owner X Voter X
4. Signature Desiree Cubero Print name DESIREE Cubero
Address P.O. Box 2145 Twentynine Palms Ca. 92277
Resident X Property owner X Voter ____
5. Signature Kyle Hannah Print name Kyle Hannah
Address 7501 BAGA Ave YUCCA VAlley Ca. 92284
Resident ✓ Property owner X Voter X
6. Signature Richard E Wootton Print name Richard E Wootton
Address 68027 Foothill Rd
Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Michelle L Walton Print name Michelle L. Walton
Address 61045 Navajo TR Joshua Tree, CA. 92252
Resident X Property owner____ Voter____
2. Signature [illegible] Print name [illegible]
Address 29 Palms General Delivery
Resident ✓ Property owner ✓ Voter____
3. Signature Sandra Duncan Print name SANDRA DUNCAN
Address 74405 COTTONWOOD
Resident ✓ Property owner ✓ Voter ✓
4. Signature JoAnn E Mannetti Print name JoAnn E MANNETTi
Address 8043A LAVA CT 29 Palms CA 92278
Resident ✓ Property owner____ Voter____
5. Signature Nancy Jacob Print name Nancy Jacob
Address P.O. Box 1136 29 Palms Ca
Resident ✓ Property owner____ Voter____
6. Signature Scarlett Stone Print name Scarlett Stone
Address 7153 Elm Rd #3 29 Palms CA 92277
Resident X Property owner____ Voter____

DOCUMENT 085
DESERT RESIDENT AND PROPERTY OWNER PETITION
RESPONSE TO COMMENTS

Response 085-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-35

1. Signature Linda Horn Print name LINDA HORN
Address 57877 SARATOGA ST. Y.V. CA 92284
Resident ✓ Property owner ✓ Voter ✓
2. Signature Bruce L Baker Print name BRUCE L. BAKER
Address 7442 CAMARILLA AVE Y.V. CA. 92284
Resident ✓ Property owner ✓ Voter ✓
3. Signature Virginia E Clark Print name Virginia E Clark
Address 61435 Crest Circle Dr. Joshua Tree, Cal 92252
Resident ____ Property owner ✓ Voter ____
4. Signature Frances Wilks Print name ____
Address 61550 Sunburst Dr., Joshua Tree, Ca 92252
Resident ____ Property owner ✓ Voter ____
5. Signature Robert C Mayer Print name Robert C. Mayer
Address 61972 Mt. View Circle, Joshua Tree CA 92252
Resident X Property owner X Voter X
6. Signature Allen G. Wolf Print name ____
Address 56333 Joshua Drive Y. V. 92284
Resident X Property owner X Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature ____ Print name Frederick J. Doherty
Address 55524 Yucca Trail, Yucca Valley Ca. 92284
Resident X Property owner X Voter X
2. Signature C.A. Dixon Print name C. A. Dixon
Address P.O. Box 301 Joshua Tree, CA 92252
Resident X Property owner X Voter ____
3. Signature Rose L. Gibson Print name ROSE L GIBSON
Address 115 Shoshone 29 Palms CA 92277
Resident ✓ Property owner ✓ Voter ✓
4. Signature Elizabeth Ann [illegible] Print name Elizabeth (Ann) Warne E
Address P.O. Box 1551, Joshua Tree, Ca 92252
Resident ✓ Property owner ✓ Voter ✓
5. Signature Kenneth F Spayd Print name KENNETH F. SPAYD
Address 60633 MT. VIEW TRAIL JOSHUA TREE, CALIF 92252
Resident ____ Property owner ____ Voter ____
6. Signature Ethel Hammond Print name ETHEL Hammond
Address 62160 Twin Mts Rd
Resident X Property owner X Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Annette S. Allman Print name ANNETTE S. ALLMAN
Address 61449 DESERT AIR ROAD J.T. 92252
Resident ✓ Property owner ✓ Voter ✓
2. Signature Gustave M. Allman Print name GUSTAVE M. ALLMAN
Address 61449 DESERT AIR, JOSHUA TREE CA-92252
Resident X Property owner X Voter X
3. Signature Earl E. Thornton Print name EARL E THORNTON
Address 65160 REAGAN Rd Joshua TREE CA 92252
Resident X Property owner ____ Voter X
4. Signature Louise A. Adams Print name LOUISE A. ADAMS
Address P.O. Box 1337 Morongo Valley CA 92256
Resident X Property owner ____ Voter ____
5. Signature Gracey M. Foster Print name GRACEY M. FOSTER
Address 6271/6 GOLDEN ST. JOSHUA TREE CA 9-2252
Resident x Property owner X Voter X
6. Signature Florence Marshall Print name FLORENCE MARSHALL
Address 2945 MISQUITE SPRINGE Road
Resident x Property owner X Voter X

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Mark Doherty Print name Mark Doherty
Address 55524 Yucca Tr. #52
Resident ✓ Property owner ____ Voter ✓
2. Signature Stella A. Baker Print name STELLA A. BAKER
Address 6951 PRESCOTT AVE YUCCA VALLEY, CA
Resident X Property owner X Voter X
3. Signature Marguerite C Johnston Print name MARGUERITE C. JOHNSTON
Address 7501 PALM AVE #105 - YUCCA Valley, CA 92284
Resident ____ Property owner X✓ Voter ____ Mobile HOME
4. Signature Elaine Levitt Print name ELAINE LEVITT
Address 7530 PALM AVE YUCCA VALLEY, CA
Resident ____ Property owner ____ Voter ____
5. Signature Brian Levitt Print name Brian Levitt
Address 7530 PALM AVE YUCCA Valley
Resident ____ Property owner ____ Voter ____
6. Signature Marston H. Blair Print name MARSTON H BLAIR
Address 56340 Church COURT - YV. 92284
Resident ✓ Property owner ✓ Voter ✓

2.6-37

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Sharon Cottingham Print name Sharon Cottingham
Address 55348 Mtn View Trail - Yucca Valley
Resident ✓ Property owner x Voter ___
2. Signature Nancy Henninger Print name Nancy Henninger
Address 58165 ARCADIA TR Yucca Valley CA
Resident ✓ Property owner ✓ Voter ✓
3. Signature Jennifer Walton Print name Jennifer Walton
Address 7637 Cherokee Trail Yucca Valley CA
Resident ✓ Property owner ___ Voter ✓
4. Signature Print name ROBERT C BENNETT
Address 7561 PALM AVE YV 92284
Resident ✓ Property owner ___ Voter ✓
5. Signature Floyd R Hillis Print name Floyd R. Hillis
Address 8388 Acoma Ct. Yucca Valley, CA 92284
Resident ✓ Property owner ✓ Voter ✓
6. Signature Connie L Robinson Print name Connie L Robinson
Address 6161 Mirlo Rd Yucca Valley CA 92284
Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Jeanne Belt Print name JeanNe BeLT
Address 7219 Cherokee Yucca Valley, Ca
Resident ✓ Property owner ✓ Voter ✓
2. Signature Don Laise Print name DON LAISE
Address 6343 CIENEGA 29 Palms
Resident ✓ Property owner ✓ Voter ✓
3. Signature Jerline Zeller Print name JERLINE ZELLER
Address 78375 MESA DR WonderVALLEY
Resident ✓ Property owner ✓ Voter ✓
4. Signature Evalena Marsh Print name EVALENA MARSH
Address 8590 La Contenta Rd. Yucca Valley 92284
Resident ✓ Property owner ✓ Voter ✓
5. Signature Z.A. Swartney Print name Z. A. Swartney
Address P.O. Box 3188 Landers, CA 92285
Resident ✓ Property owner ✓ Voter ✓
6. Signature Donna G Totten Print name Donna G. Totten
Address 7373 Rubidoux Yucca Valley, Ca 92284
Resident x Property owner x Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Print name Marcia Pealstrom
   Address ~~POB~~ 7516 Barberry Y.V.
   Resident ✓ Property owner ✓ Voter ✓
2. Signature Norma J Saunders Print name NORMA S. SAUNDERS
   Address 58532 SAN ANDREAS ROAD Y.V.
   Resident X Property owner X Voter X
3. Signature Donna Hubley Print name Donna Hubley
   Address 7995 Grand ave Yucca Valley 92284
   Resident ✓ Property owner ✓ Voter ✓
4. Signature Print name JACK B HUBLEY
   Address 7995 GRAND AVE YUCCA VALLEY 92284
   Resident ✓ Property owner ✓ Voter ✓
5. Signature Mary A Davis Print name MARY A DAVIS
   Address 8259 AMADOR Yucca Valley
   Resident ✓ Property owner ✓ Voter ✓
6. Signature Suzanne Pratt Print name SUZANNE PRATT
   Address HC1 Box 1011 - Joshua Tree, CA 92252
   Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Frank J Giesing Print name FRANK J. GIESING
   Address 8180 STAR LANE JOSHUA TREE, CA 92252
   Resident X Property owner X Voter X
2. Signature Joan L Giesing Print name JOAN L. GIESING
   Address 8180 STAR LANE JOSHUA TREE 92252
   Resident ✓ Property owner ✓ Voter ✓
3. Signature Eric M Giesing Print name ERIC M GIESING
   Address 8180 STAR LANE JOSHUA TREE CA 92252
   Resident ✓ Property owner ____ Voter ____
4. Signature Louise S Erickson Print name LOUISE S. ERICKSON
   Address 62352 Rincon Rd JOSHUA TREE, CA 92252
   Resident ✓ Property owner ✓ Voter ✓
5. Signature Melvin A Benson Print name MELVIN A BENSON
   Address 60846 MT VIEW TR. JOSHUA TREE CA 92252
   Resident X Property owner X Voter X
6. Signature David L [illegible] Print name David L [illegible]
   Address 8686 Indio Yucca Vly CA. 92284
   Resident ✓ Property owner ✓ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

2.6-39

1. Signature Earl B Pealstrom Print name EARL B. PEALSTROM
   Address 7576 BARBERRY AVE YUCCA VALLEY CA. 92284
   Resident X Property owner X Voter X
2. Signature Print name ALAN BARRETT
   Address 53453 ROCKING CHAIR RD JOSHUA TREE CA 92252
   Resident X Property owner X Voter X
3. Signature Print name GEORGE ZELEZ
   Address 7630 CONEJO JOSHUA TREE 92252
   Resident X Property owner_____ Voter X
4. Signature George N. Burton Print name George W Burton
   Address C Co 1st TANK BN.
   Resident X Property owner X Voter X
5. Signature__________ Print name__________
   Address__________
   Resident_____ Property owner_____ Voter_____
6. Signature__________ Print name__________
   Address__________
   Resident_____ Property owner_____ Voter_____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Elizabeth McGrath Print name ELIZABETH McGRATH
   Address 797 INDIAN TRAIL 29 PALM CALIF.
   Resident X Property owner X Voter X
2. Signature Pauline Aspaas Print name PAULINE ASPAAS
   Address 78613 INDIAN TRIAL 29 PALM CALIF
   Resident ✓ Property owner_____ Voter_____
3. Signature Stephen D Cambi Print name Stephen D Cambi
   Address 4949 Sherwood Joshuatree Ca 92252
   Resident ✓ Property owner ✓ Voter ✓
4. Signature__________ Print name__________
   Address__________
   Resident_____ Property owner_____ Voter_____
5. Signature__________ Print name__________
   Address__________
   Resident_____ Property owner_____ Voter_____
6. Signature__________ Print name__________
   Address__________
   Resident_____ Property owner_____ Voter_____

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature James A. Robinson Sr. Print name JAMES A. ROBINSON, SR.
Address 6161 MIRLO RD., YUCCA VALLEY, CA 92284
Resident x Property owner x Voter x

2. Signature Mary M. Simms Print name Mary M Simms
Address 2120 Dashwood Lakewood CA 90712
Resident ____ Property owner ✓ Voter ✓

3. Signature ____ Print name MARTIN Simms
Address 2120 DASHWOOD ST. LAKEWOOD CA 90712
Resident ____ Property owner x Voter ____

4. Signature ____ Print name GARY J. LINK
Address 7767 ACOMA Tr Yucca Valley CA. 92284.
Resident x Property owner ____ Voter x

5. Signature Anita T. Link Print name Anita T. Link
Address 7767 Acoma Trail. Yucca Valley
Resident ____ Property owner ____ Voter ____

6. Signature ____ Print name ____
Address ____
Resident ____ Property owner ____ Voter ____

DOCUMENT 086
DESERT RESIDENT AND PROPERTY OWNER PETITION
RESPONSE TO COMMENTS

Response 086-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

February 28, 1993

County of San Bernardino
Planning Department
385 No. Arrowhead Avenue, Third Floor
San Bernardino, CA 92415-0182
ATTN: Mr. Randy Scott

To Whom It May Concern:

Please find enclosed petitions signed by southern California desert residents in opposition to the proposed Bolo Station landfill project in its entirety, to include all proposed area alternate sites.

Please include these in the administrative record.

Thank you.

Sincerely,

Christine Carraher
7628 Robin Road
Twentynine Palms, CA 92277
(619) 361-0505

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Doug Barron Print name DOUG BARRON
Address 3462 PORTER JOSHUA TREE CA 92252
Resident X Property owner X Voter X
2. Signature [illegible] Print name [illegible]
Address [illegible] 92252
Resident ✓ Property owner ✓ Voter X
3. Signature [illegible] Print name [illegible]
Address [illegible] Palms
Resident ____ Property owner ✓ Voter ✓
4. Signature Jeanne Shearer Print name Jeanne Shearer
Address P.O. Box 774
Resident ✓ Property owner ✓ Voter ____
5. Signature Sue Baptist Print name SUE BAPTIST
Address P.O. Box [illegible] 29 Palms CA 92277
Resident ____ Property owner ____ Voter ____
6. Signature Print name Christine Carraher
Address 7628 Robin Rd. 29 Palms, CA 92277
Resident ✓ Property owner ____ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature ______ Print name F.W. HOPKINS
Address P.O. Bx 2224 - 29 Palms
Resident ____ Property owner ____ Voter ____
2. Signature ______ Print name F.W. HOPKINS
Address ______
Resident ✓ Property owner ____ Voter ____
3. Signature Joan Brucker Print name JOAN BRUCKER
Address 7054 Broad 29 Palms CA 92277
Resident ____ Property owner X Voter X
4. Signature Joyce Kenworthy Print name Joyce Kenworthy
Address 7045 Wilshire 29 PALMS
Resident ✓ Property owner ____ Voter ✓
5. Signature ______ Print name CLIFFORD D PINARD
Address 7935 WILSHIRE 29
Resident ✓ Property owner ____ Voter ✓
6. Signature ______ Print name LINDA BARNES
Address 75743 Old Dale Rd
Resident ✓ Property owner ____ Voter ✓

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Alice Murillo Print name Alice Murillo
Address 75025 Old Dale Rd.
Resident ✓ Property owner ✓ Voter ✓
2. Signature ______ Print name Randy L. Paschall
Address 6555 Sahara Ave, 29 Palms
Resident ____ Property owner ____ Voter ____
3. Signature ______ Print name [illegible]
Address ~~7195 Wilshire~~ 9191 Wilshire 29 Palms
Resident ✓ Property owner ✓ Voter ✓
4. Signature ______ Print name David Alvarez
Address 7311 Baldwin 29 Palms Ca
Resident ✓ Property owner ____ Voter ✓
5. Signature ______ Print name Ted Balok
Address 7156 Baldwin 29 Palms
Resident ____ Property owner ✓ Voter ✓
6. Signature ______ Print name Angel Ruiz
Address 7775 Sahara
Resident ____ Property owner ____ Voter ____

DOCUMENT 087
DESERT RESIDENT AND PROPERTY OWNER PETITION
RESPONSE TO COMMENTS

Response 087-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

MAR 1993
RECEIVED
BY

088

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Daniel Trutanich Print name DANIEL TRUTANICH
   Address P.O. BOX 522. 29 PALMS. CALIFORNIA 92277
   Resident X Property owner X Voter X
2. Signature [illegible] Print name [illegible]
   Address 6225 29 PALMS HWY. 29 PALMS CA 92277
   Resident ✓ Property owner ✓ Voter ✓
3. Signature David Print name DAVID R. FICK
   Address 65595 SULLIVAN RD. JOSHUA TREE, CA, 92252
   Resident X Property owner X Voter X
4. Signature Ida K Foreman-Fick Print name Ida K Foreman-Fick
   Address 65595 Sullivan Rd Joshua Tree, CA, 92252
   Resident ✓ Property owner ✓ Voter ✓
5. Signature______ Print name______
   Address______
   Resident___ Property owner___ Voter___
6. Signature______ Print name______
   Address______
   Resident___ Property owner___ Voter___

FROM: RAY KIRKHAM
7424 MORNING STAR RD
29 PALMS, CA 92277
(619) 367-1973

DOCUMENT 088
DESERT RESIDENT AND PROPERTY OWNER PETITION RESPONSE TO COMMENTS

Response 088-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

DESERT RESIDENT AND PROPERTY OWNER PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California desert area residents and property owners opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

RECEIVED
MAR 1993
BY

We the undersigned residents and property owners of the Southern California Desert do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature [illegible] Print name [illegible] CRAWFORD
Address [illegible] Yucca Valley Ca 92284
Resident ✓ Property owner ✓ Voter ✓

2. Signature [illegible] Print name [illegible]
Address [illegible]
Resident ✓✓ Property owner ✓✓ Voter ✓✓

3. Signature [illegible] Print name [illegible] FOX
Address [illegible]
Resident ✓ Property owner ✓ Voter ✓

4. Signature Bill Valenzuela Print name Bill Valenzuela
Address 57863 Canyon Rd. Morongo Vly Ca. 92256
Resident ____ Property owner X Voter ____

5. Signature Donna McLean Print name DONNA McLean
Address 58192 Onaga Trail - Yucca Valley - CA 92284
Resident ____ Property owner X Voter X

6. Signature Print name Shaban M Shaban
Address 8785 Palomar YV. Ca 92284
Resident ✓ Property owner ✓ Voter ✓

Send By DONNA L. FOX
6989 N. STAR AVE
29 PALMS, CA. 92277-3723

DOCUMENT 089
DESERT RESIDENT AND PROPERTY OWNER PETITION RESPONSE TO COMMENTS

Response 089-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

090

CONCERNED CITIZENS' PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California area residents opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents of Southern California do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature John F. Carraher Print name John F. Carraher
Address 604 S. Ynez Ave, Monterey Park CA 91754
Resident_____ Property owner ✓ Voter ✓
2. Signature Joyce M. Carraher Print name Joyce M. Carraher
Address 604 So. Ynez Ave Monterey Park CA 91754-3886
Resident ✓ Property owner_____ Voter_____
3. Signature Anita V. Fernandez Print name ANITA V FERNANDEZ
Address 606 So Ynez Monterey Pk CA 91754
Resident_____ Property owner_____ Voter_____
4. Signature ~~Anit~~ Nemesio Fernandez Print name NEMESIO FERNANDEZ
Address 606 So. Ynez Ave Monterey Park, CA 91754
Resident_____ Property owner_____ Voter_____
5. Signature__________ Print name__________
Address__________
Resident_____ Property owner_____ Voter_____
6. Signature__________ Print name__________
Address__________
Resident_____ Property owner_____ Voter_____

Sent by: John F. Carraher
604 S. Ynez Ave.
Monterey Park, CA 91754

DOCUMENT 090
DESERT RESIDENT AND PROPERTY OWNER PETITION
RESPONSE TO COMMENTS

Response 090-1

1. These petitions register the objections of those signing to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

2.6-53

FEB 1993
RECEIVED

CONCERNED CITIZENS' PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California area residents opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents of Southern California do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature David Lopez Print name David Lopez
   Address 2136 Fitzgerald ave Commerce Calif 90040
   Resident yes Property owner NO Voter yes
2. Signature Janos Serfozo Print name Janos Serfozo
   Address 2134 Fitzgerald Ave. Commerce, Calif. 90040
   Resident Yes Property owner Yes Voter No
3. Signature Print name Jesus Cervantes
   Address 1411 S. MC BRIDE AVE COMMERCE, CA. 90022
   Resident yes Property owner yes Voter yes
4. Signature Sylvia Munoz Print name Sylvia Munoz
   Address 5595 E Village DR Commerce CA 90040
   Resident yes Property owner ____ Voter yes
5. Signature Bertha C. Cervantes Print name BERTHA C. CERVANTES
   Address 1411 So. Mc BRIDE Ave. Commerce, CA. 90022
   Resident yes Property owner yes Voter yes
6. Signature Caroline Beranda Print name Caroline Beranda
   Address 2260 Fairgrounds St.
   Resident ✓ Property owner ✓ Voter ✓

Sent by: Gary Lopez
5632 E. Mission Way
Commerce, CA90040

CONCERNED CITIZENS' PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California area residents opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents of Southern California do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Manuel Larios Print name MANUEL LARIOS
   Address 2420 COMMERCE WAY
   Resident ✓ Property owner ✓ Voter ✓
2. Signature ____ Print name ANTHONY JUDE THORPE
   Address Anthony Jude Thorpe. 2512 LEO AVE. COMMERCE CA. 90040
   Resident ____ Property owner ✓ Voter ✓
3. Signature Peter Corral Print name PETER CORRAL
   Address 7428 TEGNER DR., ROSEMEAD, CA. 91770
   Resident ✓ Property owner ✓ Voter ✓
4. Signature Print name Roger DeVries
   Address 2584 FIDELIA AVE COMMERCE CA
   Resident ____ Property owner ____ Voter ✓
5. Signature Jesus Flores Print name JESUS FLORES
   Address 2546 Commerce way
   Resident ✓ Property owner ✓ Voter ✓
6. Signature Adolph V. Lopez Print name Adolph V. LOPEZ
   Address 5632 E MISSION WAY Commerce WAY
   Resident ✓ Property owner ✓ Voter ✓

2.6-54

CONCERNED CITIZENS' PETITION

To: San Bernardino County Planning Department and all subsequent decision-making bodies relative to the Rail Cycle Bolo Station Landfill project and associated EIR/EIS (State Clearinghouse No. 91092020) for inclusion in the administrative record.

From: Southern California area residents opposed to the use of our deserts as Metropolitan Area trash and garbage dumps.

Subject: URGENT REQUEST FOR DENIAL OF THE BOLO STATION PROJECT IN ITS ENTIRETY, TO INCLUDE ALL PROPOSED AREA ALTERNATE SITES.

We the undersigned residents of Southern California do hereby request of the San Bernardino County Planning Commission and all subsequent decision makers on the Rail-Cycle proposed Bolo Station Landfill applications for permits, and Bureau of Land Management land transfers that this project be denied in all the forms suggested in the EIR/EIS.

Projects such as Bolo Landfill would foul our desert environment irreparably with trash, garbage, and water and air pollution. It would set a precedent of Metropolitan Area dominance over the interests of the Desert Communities and would undoubtedly be followed by other similar projects.

1. Signature Evelyn Romero Print name EVELYN ROMERO
Address 2532 Leo Ave City of Commerce 90040
Resident X Property owner X Voter yes

2. Signature [illegible] Print name [illegible]
Address [illegible] Commerce [illegible]
Resident ___ Property owner ___ Voter ✓

3. Signature [illegible] Print name Rosa Tina Lopez
Address 5632 E Mission Way Commerce CA 90040
Resident ___ Property owner ___ Voter [illegible]

4. Signature [illegible] Print name [illegible] Fritz
Address 7100 GAGE AVE # 220 COMMERCE CA 90040
Resident ___ Property owner ___ Voter yes

5. Signature [illegible] Print name GARY LOPEZ
Address 5632 E. MISSION Way Commerce CA 90040
Resident ___ Property owner ___ Voter ___

6. Signature Rosa M. Zambrano Print name ROSA M. ZAMBRANO
Address 5604 MISSION WAY Commerce CA 90040
Resident ✓ Property owner ✓ Voter ✓

DOCUMENT 091
DESERT RESIDENT AND PROPERTY OWNER PETITION
RESPONSE TO COMMENTS

Response 091-1

1. These petitions register the objections of those signing the petition to the proposed Bolo Station Landfill. As the petitions do not provide comments on the Draft EIR/EIS, no specific response is required.

2. By inclusion of these petitions in this Final EIR/EIS, they become part of the administrative record. The County Board of Supervisors and BLM will review this Final EIR/EIS prior to making a decision regarding the proposed project.

We the undersigned feel that the San Bernardino County
should vote no on the proposed Amboy rail dump. If this dump
comes around to being then no matter what it WILL wreck the natu-
ral beauty of the desert. Even if a nine foot high fence is put
up it will not stop litter from being blown away. We have dust
devils frequently which will carry trash away. Wind goes over ①
things it does not stop so the litter will be carried away. All
of the animals that live in that area will have to leave or they
will use the dump as a feeding ground. If they eat there they
could digest a harmful chemical or swallow something that will
get clogged in their digestive system. Even though it is illegal
people still throw liquids like gas and oil away which can seep
down into the water table which would then pollute the water in ②
which many people do drink from and our water table in the desert
is low and fragile. Our air is very clean, if garbage is brought
up here that requires using Trucks or Train.
Trucks will give us much more traffic which means more pollution ③
because they do not have any scrubbers to dilute all of the
exhaust. The train will do about the same with both noise pollu- ④
tion and creating smog. The high Deserts clean air will get
worse and the clean air is the main reason that people move out
here.We are asking that you will please vote NO on the proposed
Amboy dump.

2.6-57

Eric M Durat
Taylor
Jerry ashton
Brad Hall
Mr. R.E. Cowsley
R. Lejuis
avery K Smith
Dean Smith
KATHERINE SMYER
Shekela Brown
Sabrina Henley
Jennifer Goodwin
Brown

Bridgette Haskin
Kelly Williams
Justina Harrison
Carlos Almanza
Elizabeth A Wilson
Debra Overbay
Bev Wood
Jeanette RAYMOND
Natasha Brooks
Michelle
Annette
Kaori Uchida
1. John Randall Brice

Patricia Zahner
Tim Donovan
Susan Beohamer
Debbie Widdell
Laurel Seidl
Blanca Romero
Stephanie Jones
Jeffery Solomon
Kathy Emerson
Neal

Josh Ewer
Crystal Orman
Stacy Moore
Johnny Collins
Monica Deutsch
Justin Rice
Chris Nolte
Melissa Seals
Camon Marshall
Darla Sleet
Mike Walls
Allen Sertz
Sarah Peck
Randy
Christopher Holmes
J.K. Williams
Roberta Moore
Michelle Howe
Crystal Tucker

Janicka Smith
Barbara L. Brink (School Bus Driver)
Lucky Chapa
Sue Whitney
Diane D. Donald
Wanda L. Davis
Debbie A. Harris (school bus driver)
John R Davis
Debora K Davis
Mrs S Green
Angela Martinez
Michele M. Moya
Brad Fowler
Danielle Johnson
Adrienne Baldwin
John Morgan
David Rumsey
Jayme Rios
2. Melissa Grant

Sabrina Clark
Steve Graham
Mas Borero
Amanda Biszak
Julian Brewer
Kenneth E Clark
MARK N. Lee
Betty VanRavensway
Kasey Forman
Andrew Trafla

Adrian French
Shaunna Steudee
Heidi marshall
Alicia C. Hitch
Sun Ra Akuffman
Marina Moon
[illegible] Winstie
Nicole Seitenreich
Rory Ray
[illegible]
Victoria W[illegible]

2.6-58

Ryan B. Moore
Damon Baptista
Ross S. Silva
Trance
Rick Rizzo
EVELyn Rizzio
EVELyn DalLhiera
Heather Jarvis
Joy Jarvis
Rick Bates
Richard Jarvis
Evelyn Jarvis
Evelyn Watson
Mary L Rygg-Cayno

Jean Erik Bjornstad (Rep. of people of Norway).
Stephen Bigelow
Jamie Bechtold
Heather Shade!
Robert Geddes

3.

sent BY ↓

Eric M. Ducat
P.O. Box 266
29 Palms, CA 92277

DOCUMENT 092
ERIC M. DUCAT - PETITION
RESPONSE TO COMMENTS

Response 092-1

1. Bolo Station is in an area that experiences lower velocity winds than various other areas in which landfills are operated in conformance with the litter control conditions of their permits. For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County, California (data from January through December 1991) is provided below:

PERCENTAGE OF HOURLY OBSERVED WIND SPEEDS

WIND SPEED HIGHER THAN:	BOLO STATION	ALTAMONT
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

2. The Altamont Landfill is located in an area of relatively constant wind velocity and has attracted wind powered electrical generating facilities. According to WMNA, this landfill is operated in compliance with the conditions of its SWFP including litter control. The Altamont Landfill is permitted to receive up to 11,500 tons of waste per day and typically receives 6,000 tons of waste on a daily basis. The majority of waste is transported to the site by transfer trailers that are tipped at the working face using a portable tipper similar to those proposed at Bolo Station.

3. Litter control measures for the proposed Bolo Station Landfill were discussed in Section 3.3.2.1.3 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected onsite.

4. An important point to note is that by primarily accepting post-recycled waste or waste that has been processed through a MRF, a significant portion of the primary source of litter at most landfills (i.e., paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the litter control measures that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

5. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program that shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high wind velocity. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

Response 092-2

1. Hazardous waste and other special wastes defined by CCR Title 22 would not be accepted at the proposed landfill. However, small quantities of hazardous waste, primarily household hazardous waste, may inadvertently enter the waste stream. The load checking program described in Section 5.8 of the Draft EIR/EIS is expected to limit the volume of hazardous waste and household hazardous waste reaching the working face to less than 0.5 to 1 percent of the total volume. However, the potential for small quantities of hazardous leachate from municipal wastes is acknowledged. Hazardous components would represent a minor constituent of any leachate, and a release would be detected by the UZM system and downgradient monitoring wells within sufficient time to implement corrective action (see Section 3.2.4 of the Supplement for details).

Response 092-3

1. This comment expresses general concerns regarding potential traffic, air quality, and noise impacts associated with operation of the proposed Bolo Station Landfill, and transportation of solid waste by rail. Traffic, air quality, and noise impacts associated the proposed Bolo Station Landfill were discussed in Sections 5.12, 5.7, and 5.13, respectively, of the Draft EIR/EIS. In addition, various aspects of the analyses performed for the Draft EIR/EIS have been refined and now include estimated potential impacts for other counties in which MRFs and/or Rail•Cycle trains may be operated. These analyses were documented in Chapters 4.0 and 5.0 of the Supplement.

Response 092-4

1. See Response 092-3.

PUBLIC HEARING IN RE:)
)
RAIL CYCLE PROJECT)
____________________________)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

LOCATION:	HOLIDAY INN 1511 EAST MAIN STREET BARSTOW, CA
DATE AND TIME:	MONDAY, FEBRUARY 8, 1993 7:00 TO 9:10 P.M.

REPORTED BY:

DIANE L. MARTIN, C.S.R., R.P.R., C.M.

(NO. 8268)

JOB NO. 21805DLM

P R E S E N T

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BY: TIM READ, HEARING OFFICER
150 COOLWATER LANE
BARSTOW, CALIFORNIA 92311
(619) 256-2729

SPEAKERS:

BURR PATTERSON, PAGE 5
RAY KIRKHAM, PAGE 11
STORMY WILLIAMS, PAGE 14
FRANK GIESING, PAGE 17
PAT DENNEN, PAGO 20
PETER BURK, PAGE 24
BARBARA RANSOM, PAGE 31
MORRIS BALDERMAN, PAGE 38
JANE WILLIAMS, PAGE 48
JOE PIZZITOLA, PAGE 58
PAUL DAVIS, PAGE 61
GEORGE RICE, PAGE 65
BILL BASKIND, PAGE 68
DONALD REACHERT, PAGE 75
STEPHEN AHMANN, PAGE 79
JOHN CURRY, PAGE 84

ALSO PRESENT:

DOUGLAS ROMOLI, BUREAU OF LAND MANAGEMENT
RANDY SCOTT, COUNTY OF SAN BERNARDINO
PLANNING DEPARTMENT

BARSTOW, CA MONDAY, FEBRUARY 8, 1993

PROCEEDINGS

-OOO-

MR. READ: GOOD EVENING, LADIES AND GENTLEMEN. I HAVE 7 O'CLOCK. I WILL NOW CALL THIS HEARING TO ORDER.

MY NAME IS TIM READ. I AM ACTING AS A HEARING OFFICER FOR THE CALIFORNIA DESERT DISTRICT. THERE HAS BEEN PUBLISHED NOTICES OF THIS HEARING AND OTHER HEARINGS THAT ARE BEING HELD WITH RESPECT TO THE SUBJECT TONIGHT. I WOULD LIKE TO READ INTO THE RECORD THE PURPOSE FOR THIS MEETING AND WHAT WE WILL BE DOING HERE TONIGHT.

A JOINT DRAFT ENVIRONMENTAL IMPACT STATEMENT AND ENVIRONMENTAL IMPACT REPORT HAS BEEN PREPARED BY THE BUREAU OF LAND MANAGEMENT AND THE COUNTY OF SAN BERNARDINO PLANNING DEPARTMENT FOR A PROPOSED SOLID WASTE LANDFILL NEAR AMBOY. THE PROJECT IS TERMED THE RAIL CYCLE BOLO STATION LANDFILL.

THE SOLID WASTE WILL BE SORTED AT LOCATIONS IN VARIOUS SOUTHERN CALIFORNIA CITIES AND COUNTIES. THE MATERIAL WILL THEN BE PACKED INTO CONTAINERS AND PLACED ON TRAINS. THE

PROPOSED SITE IS 4500 ACRES, OF WHICH 2100 ACRES WOULD BE UTILIZED FOR THE LANDFILL. THE LANDFILL WOULD BE OPEN 60 TO 100 YEARS. THE FEDERAL ACTION IS THE EXCHANGE OF 2 1/2 SECTIONS AND ISSUANCE OF AN ACCESS RIGHT-OF-WAY. THREE ALTERNATIVES WERE EXAMINED: A SITE AT CADIZ VALLEY; A REDUCED SIZE ALTERNATIVE; AND NO ACTION.

THE DRAFT EIR/EIS EXAMINES IMPACTS AT THE PROPOSED SITE AND FOR THE ALTERNATIVE. IMPACTS EXAMINED WERE TRANSPORTATION, WILDLIFE, AIR QUALITY, GROUNDWATER AND VISUAL, AMONG OTHERS.

THE PURPOSE OF THIS MEETING IS TO OBTAIN COMMENTS ON THE DRAFT EIS/EIR. ALL COMMENTS WILL BE RECORDED VERBATIM WHILE WE ARE IN SESSION BY THE RECORDER. THESE COMMENTS, AS WELL AS THE WRITTEN COMMENTS, WILL HAVE A WRITTEN RESPONSE IN THE FINAL EIS/EIR.

ADDITIONAL HEARINGS WILL ALSO BE HELD AT TWENTY-NINE PALMS HIGH SCHOOL ON FEBRUARY 10TH, AND THE SAN BERNARDINO COUNTY GOVERNMENT CENTER HEARING CHAMBERS ON FEBRUARY 11TH. BOTH MEETINGS ARE FROM 7:00 TO 9:00 P.M.

WRITTEN COMMENTS BESIDES THOSE SUBMITTED HERE WILL BE ACCEPTED UNTIL MARCH 3RD, 1993. COMMENTS ARE TO BE MAILED TO PLANNING DEPARTMENT

SAN BERNARDINO COUNTY, 385 NORTH ARROWHEAD AVENUE, THIRD FLOOR, SAN BERNARDINO, CALIFORNIA, 92415, ATTENTION: MR. RANDY SCOTT.

I WILL FIRST CALL THOSE PERSONS WHO INDICATED THEY WISHED TO MAKE A COMMENT, AND THEN I WILL ASK IF ANYONE ELSE WISHES TO MAKE A STATEMENT.

SO WITH THAT, BURR PATTERSON. WOULD YOU PLEASE STATE YOUR NAME AND SPELL IT FOR THE RECORD.

MR. PATTERSON: YES. MY NAME IS BURR, B U R R, PATTERSON, AND I LIVE IN TRONA, CALIFORNIA. AND I CAME THIS EVENING BECAUSE SOME OF MY FRIENDS WHO LIVE IN COMMERCE -- I WILL TURN THIS AROUND. I WANT TO SPEAK TO EVERYBODY AS WELL -- ASKED ME IF I WOULD THIS EVENING STOP AND BRING A FEW THINGS TO YOUR ATTENTION THAT THEY WANT TO ASK YOU TO BE AWARE OF. AND I HAVE MADE A LITTLE LIST HERE OF SOME OF THE PROBLEMS THAT MAY BE FACING US.

2.6-63

NEEDLESS TO SAY, THE GROUP THERE IN COMMERCE OBJECTS TO THE RAIL CYCLE AS IT'S PRESENTED NOW AND FEELS THAT IT WAS SORT OF PUSHED THROUGH AGAINST THEIR WISHES.

I WOULD ASK YOU TO CONSIDER THE

POSSIBILITY THAT WHITE FLIES AND MEDITERRANEAN FRUIT FLIES MAY GET TRANSPORTED HERE TO THE DESERT OUTSIDE OF THE QUARANTINE AREAS, WHERE THEY HAVE BEEN TRYING TO KEEP THEM AND KEEP THEM UNDER CONTROL. I THINK IT'S A VERY VALID THING THAT SHOULD BE BROUGHT TO THE ATTENTION OF THIS ROOM. ①

ALSO, THEY HAVE A TREMENDOUS PROBLEM WITH BIRDS AT ALL THE LANDFILLS THAT I HAVE BEEN AROUND. AND THEY PUT IN GUNS, AIR GUNS, IN ORDER TO KEEP THE BIRDS IN FLIGHT SO THEY DON'T PICK UP THE TRASH AND CARRY THE TRASH AROUND AND DROP THE TRASH ALL OVER THE COMMUNITY. AND THESE AIR GUNS MAKE A TREMENDOUS AMOUNT OF NOISE AND THEY GO OFF ALL DAY LONG. SO THIS IS A PROBLEM THAT MANY OF THE LOCAL DUMP SITES ARE HAVING. ②

I THINK THE -- THE "L.A. TIMES" HAS BEEN FULL OF ARTICLES WHERE PEOPLE WHO HAVE TRASH FACILITIES IN THEIR AREAS ARE VERY UNHAPPY BECAUSE OF THE CONTAMINATION FROM BIRDS AND THINGS OF THIS NATURE. SO WHILE WE ARE TALKING ABOUT CONTAMINATION FROM BIRDS, I WOULD BRING UP A FEW OF THE HEALTH PROBLEMS, I THINK, THAT ARE A POSSIBILITY FROM THIS RAIL THING.

BIRD DROPPINGS: THE BIRDS -- IF ANYBODY HAS EVER WATCHED -- I FEED BIRDS EVERY DAY AT MY ③

HOUSE. THEY DON'T ALWAYS EAT TOGETHER. THEY GRAB THE FOOD AND RUN, BECAUSE THE OTHER BIRDS ARE GOING TO TAKE THE FOOD AWAY FROM THEM. SO, CONSEQUENTLY, THEY WILL PICK UP CHICKEN GUTS AND STINKY THINGS FROM THE DUMP THAT'S APPETIZING TO THEM AND FLY OUT INTO COMMUNITIES TO CONSUME THEM. AND WHAT THEY DON'T EAT, THEY DROP INTO THE GROUNDS, INTO YOUR BACKYARD, ONTO THE ROOFS, IN THE NEIGHBORHOOD, AND NOW WE HAVE A HEALTH PROBLEM THAT'S ATTRACTING FLIES, STRAY ANIMALS, RODENTS. THEY HAVE AN ENORMOUS RODENT PROBLEM ANYHOW DOWN THERE. SO WE HAVE A REAL HEALTH PROBLEM FROM THAT -- FROM THAT POINT OF VIEW. ④

NOW, IT BRINGS UP TRANSPORTATION AT THE OTHER END OF THE RAIL CYCLE DOWN IN THE COMMERCE AREA. FIRST OF ALL, WE'D HAVE A PROBLEM WITH THE TRAINS GOING IN AND OUT, SITTING ON THE SIDINGS, WAITING TO MOVE. THE ODOR AND THE SMELL FROM THESE TRAINS IN THE NEIGHBORHOODS ALONG THE WAY I THINK WOULD CERTAINLY BE UPSETTING TO THE NEIGHBORS IN SAN BERNARDINO WHERE THE TRACKS COME THROUGH AND THE TRAINS HAVE TO WAIT TO BE ROUTED ON THROUGH AND UP THROUGH THE PASS AND ON OUT HERE TO THE DESERT. A VERY LARGE PORTION OF THE RAIL TRACK FROM THERE TO HERE IS THROUGH RESIDENTIAL AREAS. AND SO, WE ARE GOING TO HAVE A REAL PROBLEM THERE. ⑤

⑤ CONT.

THE OTHER THING WITH THE TRANSPORTATION, OF COURSE, IS THE -- IF THERE'S ANY OPENING OF THE CONTAINERS OR SPILLAGE OR AVAILABILITY OF THE CONTAINERS FOR THE DOGS AND CATS AND BIRDS, AGAIN, TO GET TO WHILE THEY ARE STOPPED, THEY ARE GOING TO DO IT IN ALL THE LOCAL COMMUNITIES BETWEEN COMMERCE AND OUT HERE. SO THIS IS GOING TO CAUSE AN ENORMOUS PROBLEM IN THAT AREA ALSO. ⑥

THEN, IN THE ACTUAL COMMERCE AREA WHERE THE FIRST TRASH POINT IS BEING LOCATED THERE, IF ANYBODY HAS EVER BEEN AROUND SOME OF THESE DUMP SITES, THERE'S A CONTINUOUS BUNCH OF BROKEN-DOWN TRUCKS SITTING ON THE SIDE OF THE ROAD WITH TWO OR THREE PEOPLE OUT WORKING ON THEM IN DIRTY CLOTHES. WELL, WHILE THE TRUCK IS SITTING THERE, THERE'S LIQUID RUNNING OUT OF THE TRUCK INTO THE STREETS AND STINKING SOMETHING TERRIBLE. I DON'T KNOW IF YOU'VE EVER FOLLOWED A GARBAGE TRUCK THAT STUNK, BUT I'VE FOLLOWED A FEW AND, BOY, DO THEY STINK. AND WE ARE GOING TO HAVE ALL THESE TRUCKS JUST LIKE A SPIDERWEB COMING TO THE CENTER TO THIS DUMP SITE WHERE THEY ARE GOING TO BE SUPPOSEDLY RECYCLING THIS STUFF TO SHIP UP HERE. ⑦

2.6-65

⑦ CONT. BUT AT THAT TIME WE ARE GOING TO ALSO HAVE ALL THE STUFF BEING SPILLED OUT ON THE STREETS, TRUCKS BROKE DOWN AT LA PUENTE. THE SAME PROBLEM. I GO DOWN THERE FREQUENTLY AND I HAVE NEVER MADE A TRIP IN THERE WHEN THERE WASN'T A PROBLEM OF TRASH TRUCKS BROKE DOWN THERE ON THE 60 FREEWAY AND ON THE OTHER STREETS RIGHT THERE IN THAT AREA.

⑧ ALSO, THE DAMAGE TO THE STREETS. THERE'S A -- ALL THESE HEAVY TRUCKS USING -- YOU KNOW, THE EXCESSIVE USE OF THE STREETS IN THAT AREA IS GOING TO CAUSE A LOT OF DAMAGE TO THE STREETS RIGHT THERE IN THE IMMEDIATE AREA. AGAIN, WE HAVE THE SPIDERWEB THING WHERE WE HAVE ALL THESE TRUCKS COMING TOGETHER TO ONE AREA. SO I WOULD BRING THAT TO YOUR ATTENTION. IT'S GOING TO BE A TREMENDOUS PROBLEM WITH ALL THESE TRUCKS COMING INTO ONE AREA.

AND I THINK WE COVERED, ALSO, THE WASTE THAT'S GOING TO BE DUMPED ONTO THE STREETS. AS THEY COME CLOSER TO THE CENTER OF THIS AREA, WELL, WE ARE GOING TO HAVE MORE AND MORE SPILLAGE AND MORE AND MORE LOSS IN THE AREA.

SO I THINK THE ANSWER TO THIS, ALSO, IN OFFERING AN ALTERNATIVE, OF COURSE, IS RECYCLING, COMPLETE RECYCLING AS THEY DO IN -- UP IN

WASHINGTON AND OREGON, BUT UP IN WASHINGTON ⑨ ESPECIALLY, WHERE YOU DO RECYCLE. IF LOS ANGELES RECYCLED THEIR TRASH, THEN WE WOULDN'T HAVE A NEED FOR A DUMP HERE IN AMBOY, BECAUSE THERE WOULDN'T BE THIS ENORMOUS AMOUNT OF TRASH. AND I THINK THE BOTTOM LINE ON THAT IS THAT THE -- I THINK THE PERCENTAGE OF PROFIT FROM TRASH IS SOMETHING LIKE 40 PERCENT, WHILE THE PERCENTAGE OF PROFIT FROM RECYCLED GOODS IS SOMETHING LIKE 10 PERCENT, TO THE BEST OF MY OPINION. I AM NOT SURE EXACTLY WHAT IT IS, BUT I THINK THAT'S CLOSE TO BEING IN THE BALLPARK.

SO I WAS HOPING THAT I WOULDN'T BE THE FIRST TO SPEAK, BUT I WILL TRY TO SIT DOWN NOW SO EVERYBODY ELSE CAN GET A CHANCE. I WOULD LEAVE YOU WITH TWO THOUGHTS TO THINK OF, THAT EACH AND EVERY ONE OF YOU I'M SURE ARE FULL -- OR REMEMBER WELL. REMEMBER THE BARGE, THE LARGE BARGE FULL OF TRASH THAT WAS TOWED ALL OVER THE ATLANTIC COAST AND FLORIDA AND ALL AROUND NEW YORK CITY AND ALL THROUGH THERE TRYING TO FIND SOMEWHERE TO DUMP A LARGE BARGE FULL OF TRASH.

AND THEN I ASK YOU ALSO TO REMEMBER THE TRAIN THAT WAS RUNNING ALL OVER THE AREA OF UP NORTH AND IN THE EAST OVER THERE, A WHOLE TRAIN

FULL OF TRASH. THEY COULDN'T EMPTY IT ANYWHERE. NEIGHBORHOODS WERE SCREAMING AND HOLLERING AT THE STINKING TRAIN PARKED IN THEIR AREA, FLIES, DOGS. IT WAS A NIGHTMARE FOR THOSE PEOPLE.

SO IN MY CLOSING, I ASK YOU JUST TO REMEMBER TWO THINGS. REMEMBER THE BARGE AND REMEMBER THE TRAIN, BECAUSE WE MAY HAVE ONE OF OUR OWN. THANK YOU.

MR. READ: THANK YOU. THERE ARE A FEW CHAIRS LEFT UP IN THE FRONT HERE. RAY KUCKHAM?

MR. KIRKHAM: KIRKHAM.

MR. READ: I AM SORRY. AGAIN, IF YOU WILL SPELL YOUR NAME.

MR. KIRKHAM: I WILL. MY NAME IS RAY KIRKHAM. I COME FROM TWENTY-NINE PALMS. I AM SPEAKING FOR MYSELF.

2.6-66

THE ISSUE I WANT TO ADDRESS TONIGHT IS THE SCOPE OF THIS PARTICULAR EIR AND THE PROBLEM WITH EIR COVERAGE OF THIS TYPE OF PROJECT IN GENERAL.

THE BOLO STATION LANDFILL IS A PART OF A MUCH LARGER PROJECT, AND THE SCOPE OF THE EIR ON THIS PROJECT SEEMS TO TRUNCATE ITS OVERSIGHT FAR SHORT OF THE IMPACTS, FAR SHORT OF THE REACH OF THE IMPACTS. WHENEVER YOU PUT TOGETHER A SCHEME

TO CENTRALIZE SOMETHING, WHAT HAPPENS IS THAT, IN FACT, ALL OF THE AREAS THAT THIS MATERIAL COMES FROM ARE IMPACTED BY THIS CENTRALIZATION APPROACH TO WHATEVER IT IS THAT YOU ARE DOING.

NOW, IN THE CASE OF BOLO, ALL OF A SUDDEN MATERIALS NEED TO BE -- NEED TO -- NEED TO TRAVEL HUNDREDS OF MILES, ALL OVER CALIFORNIA. IT'S 230 MILES FROM THIS ONE SITE IN COMMERCE TO THE DUMP SITE, WHICH MEANS THAT EVERY -- EVERY POUND OF TRASH THAT FINALLY ENDS UP AT BOLO MUST TRAVEL 230 MILES BY TRAIN.

AND THERE ARE LOCATIONS -- I HOPE EVERYONE HAS HEARD SO FAR. THERE ARE LOCATIONS WHERE THIS NETWORK OF TRAIN LINES COMES TOGETHER, PARTICULARLY IN THE CITY OF SAN BERNARDINO WHERE, IN FACT, FROM SAN BERNARDINO ON UP THROUGH THE CAJON PASS, THROUGH VICTORVILLE, AND THROUGH THIS TOWN, ALL OF THAT GARBAGE TRAVELS. SO, THEREFORE, ALL OF THE IMPACTS OF A MARKET AREA THAT EXTENDS FROM SAN DIEGO COUNTY IN THE SOUTH TO THE EDGE OF, IF NOT INTO, VENTURA COUNTY IN THE NORTH, ALL OF THAT GARBAGE IS GOING TO BE IMPACTING ALL OF THOSE CITIES FROM SAN BERNARDINO ALL THE WAY OUT TO BOLO. THAT IS NOT TRULY COVERED IN THE EIR. THEY GIVE YOU SUCH A COMPLEX LISTING OF RAIL CROSSINGS

(10)

AND LENGTHS OF TIMES THAT TRAFFIC MUST WAIT FOR TRAINS AND TRAINS MUST WAIT FOR TRAFFIC, THAT THE AVERAGE CITIZEN OR EVEN A VERY WELL-EDUCATED CITIZEN CANNOT PICK OUT OF THAT EIR WHAT IT ALL MEANS. AND I DO DEFY THE MAKERS OF THAT EIR TO TELL ME WHAT IT MEANS. ⑩ CONT.

I THINK THE OTHER THING IS THAT THERE IS A COMMERCIAL IMPACT ON THE ENTIRE SOUTHERN CALIFORNIA AREA, WHICH CANNOT BE PROPERLY ADDRESSED BY ANY EIR OR BY ANY EIR PROCESS, BEING AS THESE THINGS SEEM TO BE LIMITED TO COUNTIES. AND I DON'T SEE ANY WAY THAT PROPER OVERSIGHT ON THIS TYPE OF PROJECT WILL IN FACT BE ESTABLISHED ANYTIME SOON.

I PERSONALLY AM OPPOSED TO THE CONCEPT ITSELF OF CENTRALIZING TRASH. THERE ARE ALTERNATIVES WHICH HAVE NOT BEEN COVERED IN THE EIR WHICH INVOLVE PROCESSES, TREATMENT PROCESSES FOR CONVERSION OF WASTE THROUGH -- THROUGH COMPOSTING AND, ALSO -- WELL, THAT'S THE MAIN ONE, IS COMPOSTING, AND ALSO THROUGH REPROCESSING OF PLASTICS. THAT'S A NEW TECHNOLOGY AND IT'S JUST UP AND COMING. ⑪

BUT THE THING IS, WHY ARE WE GOING TO START A PROCESS, A DUMPING PROCESS, A NEW DUMPING

PROCESS WHEN, IN FACT, WE ARE AT THE END OF THE AGE WHEN WE CAN CONTINUE TO DUMP AND FORGET IT. I AM CONCERNED THAT THIS PROJECT WILL, IN FACT, IMPACT EMERGING TECHNOLOGIES AND WILL MAKE IT DIFFICULT FOR LOCALITIES TO MANAGE THEIR OWN WASTE, WHICH IS WHAT THEY ARE GOING TO ULTIMATELY HAVE TO DO. ⑫

I BELIEVE THAT'S REALLY ALL I HAVE TO SAY. THANK YOU.

MR. READ: OKAY. THANK YOU. WE NEED TO TAKE A BRIEF RECESS TO OPEN THE ROOM UP. THERE'S MORE PEOPLE THAN WE ANTICIPATED. SO WE WILL TAKE THE MAINTENANCE MAN HERE AND HE WILL OPEN THE ROOM UP, AND WE WILL RECONVENE AS SOON AS THE ROOM IS REARRANGED. PROBABLY NO MORE THAN FIVE MINUTES.

(BRIEF RECESS WAS TAKEN.)

MR. READ: IS EVERYONE IN FROM THE HALL?

ALL RIGHT. THANK YOU FOR YOUR COOPERATION DURING THAT PAUSE. WITH THAT, LET'S RECONVENE THE MEETING. STORMY WILLIAMS.

MS. WILLIAMS: GOOD EVENING. I AM STORMY WILLIAMS. I LIVE IN ROSAMOND IN KERN COUNTY IN THE HIGH DESERT. WE ARE THE TOXIC

2.6-68

CAPITAL OF KERN COUNTY WHERE I LIVE. WE HAVE 24 TOXIC SITES. WE HAVE LOST SEVEN OUT OF NINE CHILDREN TO CANCER. I, UNFORTUNATELY, LIVE NEAR THE STATE'S ONLY TOXIC INCINERATOR, NATIONAL CEMENT, SO WE ARE SORT OF AUTHORITIES ON THESE THINGS. AND I AM THE DESERT REPRESENTATIVE FOR CALIFORNIA COMMUNITIES AGAINST TOXICS.

AND JUST LAST YEAR, WE GOT SO FED UP WITH THIS PROJECT, THE EAGLE MOUNTAIN LANDFILL, THE TWO TOXIC REPOSITORIES PLANNED EAST OF HERE IN WARD VALLEY, WE STARTED A NEW GROUP. IT'S CALLED "THE DESERT REBELLION." WE HAVE ABOUT 50 MEMBERS OF THAT, INCLUDING PEOPLE FROM THIS AREA AND FROM THE M.R.F. SORTING FACILITY IN COMMERCE.

WE ARE THE PRIME EXAMPLES OF PROJECTS GONE WRONG. ALL OF OUR TOXIC SITES ARE BUSINESSES THAT HAVE RUN AMOK. THINGS NEVER WORK THE WAY THAT THEY ARE EXPLAINED AND TOUTED. WE KNOW THIS VERY WELL. ⑬ WE WANT TO ENCOURAGE LARGE CITIES, SUCH AS L.A. AND SAN DIEGO, TO TAKE CHARGE OF THEIR OWN TRASH, TO PRODUCE LESS TRASH. I PERSONALLY DO NOT NEED TRAVE UNDER MY TOMATOES. I DO NOT NEED JACKETS OVER MY GRAPES. WE THINK THAT PROVIDING A SITE -- THAT IS, A S I T E -- THAT IS A SIGHT OUT OF MIND IS A DISSERVICE TO L.A. AND

⑭ OTHER AREAS OF HIGH POPULATION. THEY ARE NEVER GOING TO COME TO GRIPS WITH THEIR PROBLEMS IF THEY EXPORT THEM TO ANOTHER AREA.

AND JUST BECAUSE WE ARE SPARSELY POPULATED OUT HERE DOES NOT MEAN THAT DESERT DWELLERS DON'T COUNT, THAT THE AIR POLLUTION IS, YOU KNOW, BAD HERE ALREADY, AND WE JUST DON'T THINK THAT THIS IS A VIABLE WAY OF TAKING CARE OF THIS. WE DON'T WANT THIS SITED HERE. WE DO NOT WANT THESE OTHER PROJECTS GOING IN. ⑮ WE WANT SOURCE REDUCTION TO TAKE CARE OF SOME OF THE TOXIC WASTE PROBLEMS.

I ALSO WANT TO BRING UP THE PROBLEMS OF LIABILITY, SUCH AS THE STRINGFELLOW ACID PITS. AND THIS IS A VERY NOW-EXPENSIVE PROJECT, $750 MILLION IN LIABILITY. ⑯ THE STATE IS INVOLVED IN THE SUIT BECAUSE THEY ISSUED A PERMIT, AND I THINK EVERYBODY SHOULD BE VERY CAREFUL OF TOUTING AND PERMITTING PROJECTS LIKE THIS, BECAUSE PEOPLE WILL BE PAYING FOR THIS IN THE FUTURE.

I HAVE SEEN STUDIES ABOUT LEACHATE FROM MUNICIPAL DUMPS COMPARED TO LEACHATE FROM TOXIC DUMPS, AND THEY ARE VERY SIMILAR. AND THIS PROJECT GREATLY DISTURBS ME, BECAUSE THE LEACHATE FROM THIS DUMP WOULD BE PUT IN EVAPORATION PONDS,

2.6-69

SO YOU ARE GOING TO HAVE FLUIDS EVAPORATING AND TOXICS VAPORIZING GOING INTO YOUR AIR. I THINK THIS IS EXTREMELY DANGEROUS. AND AS A PERSON WHO LIVES IN A COMMUNITY GREATLY IMPACTED BY TOXICS, I AM HERE TONIGHT TO SAY I THINK THIS IS A TERRIBLE IDEA. AND I WANT TO PROTECT THE DESERT. I AM IN SEVERAL COALITIONS, SEVERAL GROUPS, AND WE ARE TRYING TO KEEP THE DESERT AS BEAUTIFUL AS IT IS AND NOT ADD IMPACTS OF AIR POLLUTION AND WATER POLLUTION. AND WE URGE YOU TO NOT GO AHEAD WITH THIS PROJECT. WE FEEL IT IS VERY UNSAFE AND IMPRACTICAL. THANK YOU.

MR. READ: OKAY. FRANK GIESING. IF YOU WOULD STATE YOUR NAME AND SPELL IT FOR THE RECORD.

MR. GIESING: YES.

MR. READ: THANK YOU.

MR. GIESING: MY NAME IS FRANK GIESING, G I E S I N G. I AM FROM JOSHUA TREE IN THE MORONGO BASIN. FIRST AND FOREMOST, I AM A DESERT DWELLER, AND I JUST HAPPEN TO LIVE IN JOSHUA TREE.

ONE OF THE THINGS THAT REALLY BOTHERS ME IS -- I DON'T KNOW THE WORD TO USE OTHER THAN INSULTING INTELLIGENCE BECAUSE ADS LIKE THESE,

"OUR REPORT CARD IS IN," TO THE COMMON PERSON ON THE STREET, THAT MAKES IT LOOK LIKE THEY ARE CLEAN AND POLLUTE-PERFECT AND IT'S A GO. FALSE AND MISLEADING. IT'S NOT ONLY ME SAYING THAT ABOUT THIS. IT'S OTHER PEOPLE SAYING IT ABOUT OTHER THINGS TOO.

REFERENCE EL SEGUNDO'S LETTER DATED JANUARY 3RD, 1931 (SIC), IN THE EIR/EIS, AND THEY HAVE TO SAY ABOUT THE PRESENTATION THAT WAS MADE TO THEM AND ITS AFTERMATH, QUOTE, "MISLEADING AT BEST," UNQUOTE. THAT'S A NICE WAY OF SAYING "LIE."

NOW, WE GET TO SOMETHING ELSE THAT JUST HAPPENED JUST RECENTLY. IN FACT, I SAW IT JUST ABOUT A WEEK AND A HALF AGO IN THE PAPER. ASSEMBLYMAN QUACKENBUSH FROM SAN JOSE HAS INTRODUCED A BILL, AB-223, THAT WOULD KNOCK OUT ALL AIR QUALITY CONTROL DISTRICTS IN CALIFORNIA. AND WHAT THAT WOULD MEAN WOULD BE THAT WE ARE GOING TO START OVER FROM SCRATCH. AND WHAT DOES THAT MEAN? THAT THE MOJAVE MIGHT NOT BE THE MOJAVE ANYMORE AS FAR AS AIR QUALITY IS CONCERNED. ⑰

LINK THAT WITH SOMETHING THAT CAME OUT HERE SOMETIME BACK ABOUT PLANS TO WIDEN HIGHWAY 62 ⑱

THROUGH THE MORONGO BASIN TO THREE LANES. PEOPLE ARE SAYING, "WHY?" INCLUDING ME. I THOUGHT, "WHY?" THIS IS GOING TO HURT BUSINESSES OTHER THAN THE BUSINESSES THAT ARE JUST FOR COMMUNITY USE AND NOT DRIVE-THROUGH TRAFFIC. WELL, COME TO
FIND OUT THAT MAYBE SOME OF THIS WAS CART BEFORE ⑱ CONT.
THE HORSE, THAT SOMEBODY KNOWS SOMETHING THAT THE REST OF US DON'T KNOW, THAT THIS PROJECT IS GOING TO GO THROUGH NO MATTER WHAT, SO THEY ARE GOING TO RUN THAT -- THE TRUCK TRAFFIC THAT'S HAULING TRASH THROUGH THE MORONGO BASIN.

NOW WE COME TO ANOTHER SUBJECT THAT DOESN'T TAKE A REAL EXPERT TO KNOW THAT THE
LANDFILL INTEGRITY IS FULL OF HOLES. THE LINER
FAILURES HAVE BEEN WELL DOCUMENTED. AND THE CAP ⑲
INTEGRITY, IT DOESN'T TAKE A GENIUS TO KNOW WHAT'S
GOING TO HAPPEN TO IT. WE ARE GOING TO LOSE OUR
SCENIC DESIGNATION IN THAT AREA AS WELL AS WE'LL ⑳
PROBABLY LOSE IT THROUGH THE MORONGO BASIN ALSO
DUE TO THE ONGOING SITUATION.

REFERENCE A LETTER THAT'S ALSO A PART OF THE RECORD AND THE EIR/EIS, LETTER FROM THE AIR
RESOURCES BOARD DATED OCTOBER 11TH, 1991. THEY ㉑
ASKED FOR -- THEY ASKED FOR A NEED FOR ALTERNATIVES. THEY WERE ASKING FOR ALTERNATIVES.

REFFRENCE A LETTER BOARD -- THE INTEGRATED WASTE MANAGEMENT BOARD LETTER DATED SEPTEMBER 20TH, 1991, DOES NOT MENTION ANYWHERE IN ITS FIVE PAGES ALTERNATIVE METHODS.

REFERENCE LETTER AND ENCLOSURE FROM THE ㉑ CONT.
EIR/EIS FROM UNITED STATES DEPARTMENT OF INTERIOR DATED AUGUST 26TH, 1991. ALTHOUGH THE WORD "ALTERNATIVE" IS USED SIX TIMES, NOT ONCE DO ANY OF THESE DIFFER FROM DUMPING.

THERE ARE OTHER ALTERNATIVES. SINCE ALTERNATIVE METHODS HAVE NOT BEEN CONSIDERED ALONG WITH NUMEROUS ENVIRONMENTAL AND ANTITRUST
VIOLATIONS, HOW CAN B.L.M. EVEN THINK OF DEALING
WITH THESE PEOPLE? I FIND FOR NO ACTION IN THIS ㉒
SITUATION, BECAUSE IT'S THE ONLY REALISTIC AND
HONEST ACTION. THANK YOU.

MR. READ: THANK YOU. JIM OR SUE FILLISON.

MR. FILLISON: DECLINE.

MR. READ: PAT DENNEN? IF YOU COULD STATE AND SPELL YOUR NAME.

MR. DENNEN: PAT DENNEN, D E N N E N. I AM WITH NEWBERRY SPRINGS FIRE DEPARTMENT. I AM THE FIRE CHIEF.

I'VE GOT JUST A COUPLE OF QUICK COMMENTS

AND PRIMARILY JUST WANT TO MAKE ONE STATEMENT, THAT I AM NOT FOR OR AGAINST AND I AM NOT HERE TO COMMENT ON THE OUTCOME OF THE PROJECT BUT THE IMPACTS TO THE COMMUNITY OF NEWBERRY IF THE RAIL TRAFFIC DOES INCREASE.

㉓ FIRST OF ALL, I'VE READ THE EIR. I AM CURIOUS AS TO WHY NEWBERRY SPRINGS WASN'T EVEN MENTIONED IN IT AS A COMMUNITY OR EVEN EXISTING AND, ALSO, WHY WE DIDN'T EVEN MAKE IT ON THE MAILING LIST. IT WASN'T EVEN THERE, AS IF THE COMMUNITY OF NEWBERRY DID NOT EXIST.

㉔ AND I'D LIKE TO KNOW WHAT THE PROJECT HAS IN MIND FOR THE COMMUNITY. WHAT'S IT GOING TO DO FOR US? IN OTHER WORDS, THERE'S GOING TO BE 3,000 TONS OF TRASH INITIALLY GOING THROUGH THE COMMUNITY ON TRAINS THAT ARE 4,000 FEET LONG. THAT PRESENTS QUITE A PROBLEM FOR THE FIREFIGHTERS AND FOR THE FIRE DEPARTMENT ON A FIRE SUPPRESSION STANDPOINT. THAT'S GENERALLY THREE TIMES THE HOSE THAT EVEN A FIRE TRUCK CARRIES. SO IF FOR SOME REASON WE HAD A PROBLEM, WE'VE GOT -- WE'VE GOT A REAL PROBLEM.

㉕ THE ONE REQUIREMENT THAT I WOULD LIKE TO MAKE, IF IT -- IF IT HAS ANY IMPACT WHATSOEVER, IS TO UPGRADE THE RAILROAD CROSSING AT FORT CADY TO

㉕ CONT. INCLUDE A FULL RAIL CROSSING AS PICTURED IN YOUR EIR, CALLED STANDARD NO. 9 IN THE BACK OF THE BOOK, WITH GATES THAT COME DOWN AND ACTUALLY UPGRADE THE CROSSING, BECAUSE RIGHT NOW THERE'S ONLY TWO CROSSINGS IN NEWBERRY, AND WITH 4,000-FOOT TRAINS AND THE POTENTIAL OF UP TO 21,000 TONS OF TRASH A DAY, THAT'S GOING TO SEVERELY IMPACT EMERGENCY SERVICES WITHIN NEWBERRY SPRINGS.

㉖ ANOTHER THING THAT WE NEED TO CONSIDER IS WATER FOR FIRE SUPPRESSION. THE LAST SOLID WASTE LANDFILL FIRE THAT I WAS A PART OF, WE PUT OVER 100,000 GALLONS OF WATER ON IT, AND ALL IT DID WAS MAKE THE FIRE MAD. SO WE GAVE UP AND WE BURIED IT AND WE BABY-SAT IT FOR ABOUT A WEEK. SO THERE WASN'T ANYTHING WE COULD DO.

㉗ SUGGESTION I'D LIKE TO THROW ON THERE, SINCE YOU ARE GOING TO HAVE 4,000-FOOT-LONG TRAINS, IS MAKE THEM ABOUT 4,100 FEET AND CARRY A 5,000 GALLON WATER TANK BEHIND EACH TRAIN THAT COMES UP HERE, BECAUSE WE HAVE TO HAVE FIRE SUPPRESSION WATER FROM SOMEWHERE. AND THE FIRE SUPPRESSION WATER IS NOT TO PUT THE FIRE OUT, BUT IT'S TO PROTECT THE EXPOSURES OF THE SURROUNDING RESIDENTS AND COMMUNITIES THAT ARE GOING TO BE

㉗ CONT.
IMPACTED. BECAUSE I ALREADY KNOW YOU'RE NOT GOING TO BE ABLE TO PUT ONE OF THOSE FIRES OUT. IT'S LIKE A HAY FIRE. YOU ARE GOING TO HAVE TO SPREAD IT OUT BEFORE IT'S GOING TO GO OUT.

㉘ ANOTHER THING THAT I'D LIKE TO MAKE A REQUIREMENT FOR THIS PROJECT IS THE PURCHASE OF AN ALL-WHEEL-DRIVE MINIMUM 2,000-GALLON FIRE TRUCK BUILT TO NFPA STANDARD 1991, BECAUSE I CURRENTLY DON'T HAVE THE CAPABILITY OF GOING OFF-ROAD UP AND DOWN THE -- AND ESPECIALLY WITH THE QUALITY OF ROADS THAT WE HAVE RUNNING ALONG THE TRACKS -- AND

㉙ BY THE WAY, NEWBERRY SPRINGS FIRE DEPARTMENT'S JURISDICTION RUNS FROM THE EASTERN EDGE OF DAGGETT ALL THE WAY OUT PAST LUDLOW UNDER A COUNTY AUTOMATIC AID AGREEMENT. SO WE ARE YOUR LAST ORGANIZED FIRE PROTECTION EMERGENCY RESPONSE AGENCY BASICALLY FROM THE WEST EDGE OF NEWBERRY SPRINGS ALL THE WAY TO THE SITE UNDER AN AUTOMATIC AID AGREEMENT WITH CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION.

㉚ ALSO, ALONG WITH THE PURCHASE OF THE FIRE TRUCK, I WOULD EXPECT A MAINTENANCE AGREEMENT AND ALSO A COST RECOVERY AGREEMENT FOR MANPOWER AND LABOR FOR FIRE SUPPRESSION. AND BASICALLY, AGAIN, I WASN'T HERE TO COMMENT ON WHETHER THE THING GOES

IN OR NOT. MY PERSONAL OPINION IS I THINK THERE COULD BE ECONOMIC POTENTIAL FOR THE AREA FOR THE COMMUNITY, BUT ON THE OTHER HAND, THERE'S FAR MORE ENVIRONMENTAL RISKS AND ENVIRONMENTAL PROBLEMS THAT ARE ASSOCIATED WITH IT, AND I DON'T PERSONALLY THINK THAT IT WOULD BE TO THE BETTER OF OUR COMMUNITY. THANK YOU.

MR. READ: THANK YOU. PETER BURK?

MR. BURK: IS THIS WHERE WE TURN COMMENTS INTO?

MR. READ: YES. I CAN TAKE THAT.

MR. BURK: OKAY. THANK YOU.

I'M PETER BURK FROM BARSTOW. I AM SPEAKING FOR THE SIERRA CLUB. I AM THE SOLID WASTE COCHAIR FOR THE SAN GORGONIO CHAPTER OF THE SIERRA CLUB. IN CASE THERE'S -- I DON'T WANT TO LEAVE PEOPLE IN SUSPENSE. THE SIERRA CLUB IS SUPPORTING THE NO ACTION ALTERNATIVE ON THIS DOCUMENT.

AMERICA IS A NATION OF LAWS, AND THE DRAFT EIR/EIS HAS MORE FLAWS IN IT THAN ALMOST ANY OTHER DOCUMENT I'VE SEEN. I'VE READ A LOT OF ENVIRONMENTAL DOCUMENTS, AND THERE'S AT LEAST FIVE OR SIX LAWS THAT IT VIOLATES. I'D LIKE TO RUN THROUGH SOME OF THOSE LAWS, BUT -- I THINK IF

㉛ YOU -- A CAREFUL READING OF THE DOCUMENT SHOWS THAT THE PROPOSED PROJECT IS LIKE A DINOSAUR. IT'S INAPPROPRIATE TECHNOLOGY. THE VERY CONCEPT OF A DUMP OR A LANDFILL IS OBSOLETE NOWADAYS, ESPECIALLY EVER SINCE THE AB-939 WAS PASSED, THE CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT OF 1989. AND THIS IS THE FIRST LAW THAT THE PROPOSED RAIL CYCLE PROJECT FLIES IN THE FACE OF. THE WHOLE PURPOSE OF AB-939 IS WASTE MINIMIZATION. DID ANYBODY FIND ANYTHING IN THIS DOCUMENT THAT HAD ANYTHING TO DO WITH WASTE MINIMIZATION? IT'S ALMOST AS IF THE WHOLE DOCUMENT SAYS THE MORE TRASH YOU GET, THE MORE PROFIT YOU GET. AND THIS FLIES IN THE WHOLE FACE OF THIS AB-939.

WHAT CALIFORNIANS ARE DOING RIGHT NOW IS SOURCE REDUCTION AND RECYCLING. AND ALTHOUGH THE PROPONENTS TELL US THAT A LOT OF JOBS WILL BE COMING OUT HERE AT AMBOY AND BOLO -- THERE MIGHT BE 100 JOBS, THERE MIGHT BE A COUPLE HUNDRED -- THESE ARE GOING TO BE LOW-PAYING DUMP JOBS. THE REAL PROBLEMS IN WASTE MANAGEMENT ARE IN RECYCLING AND IN SOURCE REDUCTION. THIS IS WHERE THE REAL JOBS ARE.

ANOTHER LAW -- SET OF LAWS THAT THE DOCUMENT VIOLATES ARE THE NEPA AND CEQA, THE

NATIONAL ENVIRONMENTAL PROTECTION ACT AND THE CALIFORNIA ENVIRONMENTAL QUALITY ACT. THESE ARE THE BASIC LAWS THAT PROTECT US AS CITIZENS. AND WE ARE VERY THANKFUL WE HAVE THESE LAWS AT THIS TIME.

RIGHT AT THE BEGINNING OF THE DOCUMENT, IT STATES THAT THERE ARE FIVE SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS WHICH ARE UNAVOIDABLE EVEN AFTER MITIGATION. I HAVE NEVER READ ANOTHER DOCUMENT THAT STATES THIS. NEVER EVER. USUALLY, THE PROPONENTS WILL KIND OF SLICK THEIR WAY THROUGH AND MITIGATE THIS AND MITIGATE THAT, BUT HERE'S FIVE THINGS, THINGS SUCH AS GROUNDWATER SUPPLY, AIR QUALITY, VISUAL RESOURCES, LAND USE, AND SOCIOECONOMICS. AND I WILL GO THROUGH THESE QUICKLY IN JUST A MOMENT, BUT WHEN YOU LOOK AT THE ALTERNATIVES -- AND THE WHOLE PURPOSE OF NEPA AND CEQA IS TO PRESENT ALTERNATIVES -- WE ARE GIVEN TWO ALTERNATIVE SITES AND THEN A NO ACTION ALTERNATIVE AND THEN A REDUCED LOAD ALTERNATIVE. BUT HOW MANY OF THESE TRASH TRAINS, THESE OBSOLETE DINOSAURS ARE PROPOSED IN CALIFORNIA? WE HAVE EAGLE MOUNTAIN. WE HAVE ONE AT MESQUITE. WE HAVE ONE AT -- I CAN'T REMEMBER THE NAME OF IT -- NEAR PLASTER CITY. THERE'S ONE OUT IN UTAH. THERE'S A

WHOLE BUNCH OF THESE. AND CERTAINLY THESE ARE ALTERNATIVES AND THEY WERE NEVER EVEN CONSIDERED IN THE DOCUMENT. (32)

SO ANY ONE OF THESE FIVE THINGS COULD BE A DEATH SENTENCE TO A PROJECT LIKE THIS. LET'S TAKE GROUNDWATER. WE HAVE ALREADY HEARD PEOPLE TALK ABOUT LINERS. YOU KNOW, THIS IS -- BRISTOL DRY LAKE IS WHERE THE WATER IS. WE KNOW WITH ALL OUR PLEISTOCENE DESERT DRY LAKES THAT WATER IS THERE. THIS IS GROUNDWATER. THERE'S AGRICULTURE NEARBY. THERE'S PEOPLE NEARBY. CERTAINLY GROUNDWATER CONTAMINATION HAS TO BE MITIGATED OR THE PROJECT CAN'T GO ON. (33)

ANOTHER PROBLEM IS AIR QUALITY. WE HAVE LAWS TO PROTECT OUR AIR QUALITY, AND WHEN YOU HAVE ANYWHERE FROM 12 TO 20 TRAINS A DAY COMING THROUGH ALL THE WAY -- FROM LOS ANGELES ALL THE WAY INTO AMBOY, THIS IS GOING TO AFFECT OUR AIR QUALITY ADVERSELY. (34) AND WE HAVE LAWS TO PROTECT OUR AIR QUALITY, AND THERE ARE NOT ONE SINGLE THING THAT'S GOING TO MITIGATE OUR AIR QUALITY. THERE'S NO MENTION OF ELECTRIC TRAINS, NO MENTION OF OTHER ALTERNATIVE MOTORS ON THE TRAINS OR TRUCKS. (35) WE ARE GOING TO FIGHT TO PROTECT OUR AIR QUALITY. WE WANT TO BREATHE CLEAN AIR. WE DON'T WANT TO PAY

THE HEALTH COSTS FOR THINGS LIKE THIS. SO WE ARE GOING TO FIGHT AGAINST THIS THING.

ANOTHER THING IS VISUAL RESOURCES. NO MITIGATION ON THAT. THE DESERT ISN'T A DUMP. THIS IS A -- NEAR A VERY SCENIC PART OF THE MOJAVE DESERT, AND THERE'S NO MITIGATION PROPOSED FOR THIS.

ALSO, LAND USE. THE PROPOSED PROJECT'S CONTRARY TO THE COUNTY GENERAL PLAN. IT'S A RURAL CONSERVATION DESIGNATION. IT'S NOT -- HASN'T BEEN DESIGNATED FOR ANYTHING ELSE. SO THAT'S A REAL PROBLEM. (36)

ALSO, THE SOCIOECONOMICS. THERE'S BEEN NO MITIGATION PROPOSED FOR THAT.

THE OLD TOWNS OF AMBOY ARE OLD GHOST TOWNS EVER SINCE THE NEEDLES FREEWAY WENT BY IN 1973. THEY'VE ALL BEEN BYPASSED. WHO'S GOING TO PAY FOR ALL THE COUNTY SERVICES OUT HERE? WE HAVE ALREADY HEARD ABOUT FIRE PROBLEMS. THERE'S ALL KINDS OF OTHER COUNTY SERVICES, LAW ENFORCEMENT, SCHOOLS, ALL OTHER KINDS OF THINGS. YOU KNOW, IT MAKES YOU KIND OF MAD THAT PEOPLE THAT PROPOSE DUMPS IN THE DESERT, THEY PROPOSE THEM IN OUR DESERT BECAUSE THEY THINK WE'RE DUMB. THEY THINK THAT WE'RE UNORGANIZED, WE'RE DUMB AND STUPID AND

THAT WE DON'T KNOW ANY BETTER. AND THAT'S PART OF THE UNWRITTEN PART OF THIS DOCUMENT.

ANOTHER LAW THAT IS VIOLATED HERE IS THE ENDANGERED SPECIES ACT. EVERY TIME YOU HAVE A DUMP, SOLID WASTE DUMP, YOU HAVE RAVENS. AND RAVENS, I HAVE BEEN TOLD, CAN FLY UP TO 100 MILES A DAY. WE ARE TRYING TO SAVE THE TORTOISE. I DON'T KNOW IF WE ARE GOING ABOUT IT IN THE RIGHT WAY OR NOT, BUT CERTAINLY THERE'S NOTHING IN THE DOCUMENT TO SAY HOW RAVENS WILL BE CONTROLLED OR THOSE POPULATIONS WILL BE CONTROLLED. IT JUST SAYS THEY'LL FIND OUT SOME WAY LATER. HEY, WAIT. THAT'S NOT GOOD ENOUGH. WE HAVE TO KNOW IN THESE DOCUMENTS HOW THAT'S GOT TO BE DONE OR THE PROJECT WON'T GO AHEAD. ㊲

ONE OF THE THINGS THAT REALLY BOTHERS ME ABOUT RAIL CYCLE IS WHAT THE SAN DIEGO COUNTY DISTRICT ATTORNEY HAD TO SAY ABOUT WASTE MANAGEMENT, WHICH IS ONE OF THE PRIMARY COMPANIES IN THIS CORPORATION. AND IN MARCH OF 1992, THE SAN DIEGO COUNTY DISTRICT ATTORNEY PUBLISHED A 58-PAGE REPORT ENTITLED "FINAL REPORT - WASTE MANAGEMENT, INC." THIS REPORT CONCLUDES, "WASTE MANAGEMENT, INC.'S METHODS OF DOING BUSINESS AND HISTORY OF CIVIL AND CRIMINAL VIOLATIONS HAVE ㊳

ESTABLISHED A PREDICTABLE PATTERN WHICH HAS BEEN FAIRLY CONSISTENT OVER A SIGNIFICANT NUMBER OF YEARS. THE HISTORY OF THE COMPANY PRESENTS A COMBINATION OF ENVIRONMENTAL AND ANTITRUST VIOLATIONS AND PUBLIC CORRUPTION CASES WHICH MUST BE VIEWED WITH CONSIDERABLE CONCERN." MANY CITIES HAVE CHASED OUT WASTE MANAGEMENT. THEY DON'T WANT THEM AROUND. THIS TYPE OF -- IF THE PROJECT GOES THROUGH, WE CAN EXPECT THE SAME TYPE OF REPETITION HERE. WE DON'T WANT THIS KIND OF COMPANY IN SAN BERNARDINO COUNTY. ㊳ CONT.

IN CLOSING, I WOULD JUST LIKE TO SAY THAT IN ADDITION TO THESE SIX LAWS, THE -- OBVIOUSLY, THE PROPONENTS JUST RAN THIS THROUGH VERY QUICKLY. WE KNOW THAT THE CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD WILL HAVE TO REJECT THE DOCUMENT, BECAUSE THERE'S JUST VIOLATIONS OF THESE SIX LAWS AND PROBABLY OTHERS. SO I CAN SEE THE PROJECT BEING DELAYED FOR SEVERAL YEARS.

BUT, YOU KNOW, ONE OTHER THING BOTHERS ME BESIDES THE ENVIRONMENTAL RULES HERE, AND THAT'S THE COST TO THE COUNTY TAXPAYERS. YOU KNOW, WE GET STUCK WITH ALL KINDS OF THINGS, AND THESE DOCUMENTS DON'T EVEN MENTION THEM. WHO'S GOING TO PAY FOR THE POST -- THE CLOSURE COSTS AND THE ㊴

POSTCLOSURE COSTS? SO MANY TIMES WE HAVE COMPANIES JUST COME OUT HERE, AND THEN WHEN THEY'RE DONE THEY JUST STICK IT TO US. THERE WAS NOTHING IN THIS DOCUMENT THAT'S GOING TO SAVE US COUNTY TAXPAYERS FROM PICKING UP THIS BURDEN.

39 CONT.

THE LIABILITY PART THAT WAS MENTIONED HERE IS JUST -- JUST UNBELIEVABLE. IF YOU LOOK UP THE COMPANY THAT THEY ARE PLANNING TO DO THIS WITH, THEY ARE NOT EVEN LICENSED IN CALIFORNIA. WHO'S GOING TO PAY ALL THIS KIND OF STUFF? AND UNTIL THIS DOCUMENT -- THE DOCUMENT WILL HAVE TO BE REDONE. THE SIERRA CLUB IS RECOMMENDING THAT IT BE REDONE ALL OVER AGAIN. SO UNTIL SUCH TIME AS SOME OF THESE QUESTIONS ARE ANSWERED, WE ARE GOING TO HAVE TO STICK WITH THE NO ACTION ALTERNATIVE AND FIGHT FOR OUR RIGHTS IN THIS DESERT. THANK YOU.

MR. READ: THANK YOU. MORRIS BALDERWIN.

MR. BALDERMAN: THAT WOULD BE ME. THAT'S BALDERMAN. AND BEFORE I TALK, BARBARA RANSOM WOULD LIKE TO TALK.

MR. READ: BARBARA RANSOM?

MS. RANSOM: MY NAME IS BARBARA RANSOM, R A N S O M, AND I AM THE ENVIRONMENTAL

2.6-76

MANAGER WITH CARGILL SALT.

UNIDENTIFIED SPEAKER: CAN YOU SPEAK UP? WE CAN'T HEAR YOU.

MS. RANSOM: SURE. LET'S SEE. LET ME SEE IF I CAN GET THIS A LITTLE CLOSER.

I APPRECIATE THE OPPORTUNITY TO RESPOND TO THE INVESTIGATIONS AND CONCLUSIONS CONTAINED IN THE DRAFT EIR/EIS FOR THE RAIL CYCLE PROJECT. TONIGHT I WOULD LIKE TO DESCRIBE OUR CONTINUING CONCERNS REGARDING THE PROPOSED MEGA LANDFILL.

CARGILL SALT CURRENTLY PRODUCES A HIGH-QUALITY FOOD AND INDUSTRIAL PRODUCTS FROM THE BRINES EXTRACTED FROM A SERIES OF WELLS LOCATED LESS THAN 400 YARDS FROM THE PROPOSED MEGA LANDFILL. TO HELP VISUALIZE HOW CLOSE THE PROPOSED LANDFILL IS TO OUR BRINE WELLS, WE CAN LOOK AT THE MAP. I DON'T KNOW IF EVERYBODY CAN SEE IT.

THIS IS THE ROAD (INDICATING). OUR OPERATION OR PLANT SITE IS LOCATED HERE. THIS IS THE LOCATION OF THE PROPOSED LANDFILL. AND OUR BRINE WELLS ARE LOCATED RIGHT HERE, LESS THAN 400 YARDS FROM THE CORNER OF THE LANDFILL. THANK YOU.

TAKING A PHOTO FROM THE GROUND, LOOKING

2.6-77

FROM THE CORNER OF THE LANDFILL TO OUR BRINE WELL, JUST SO EVERYBODY CAN SEE HOW CLOSE, THIS IS THE CORNER OF THE LANDFILL WHERE THE MONITORING WELL IS, WHERE OUR BRINE WELLS ARE LOCATED (INDICATING). THANKS.

THE LOCATION --

UNIDENTIFIED SPEAKER: WHO DID YOU SAY YOU REPRESENT?

MS. RANSOM: CARGILL SALT.

THE LOCATION OF THESE WELLS IS OF GREAT STRATEGIC IMPORTANCE TO CARGILL. THE BRINES OF BRISTOL LAKE ARE UNIQUE IN CONTAINING HIGH CONCENTRATION OF CALCIUM CHLORIDE, OUR PRIMARY PRODUCT. THERE IS ONLY ONE -- THIS IS ONLY ONE OF TWO PRODUCTION AREAS IN THE STATE.

OVER THE YEARS, WE HAVE MADE SEVERAL ATTEMPTS TO LOCATE ADDITIONAL BRINE WELLS ELSEWHERE IN THE BRISTOL DRY LAKE. THESE EFFORTS HAVE NOT BEEN SUCCESSFUL. OUR BUSINESS IS DIRECTLY DEPENDENT ON A VERY SPECIFIC RESOURCE IN A VERY SPECIFIC LOCATION. THE PROJECT'S PROPONENTS WOULD LIKE TO PERSUADE YOU THAT IT WOULD MAKE SENSE TO BUILD A MEGA LANDFILL OVER 2,000 ACRES IN SIZE LESS THAN 400 YARDS AWAY FROM THE STATE'S PRIMARY SUPPLY OF FOOD-GRADE LIQUID

CALCIUM CHLORIDE. IT DOESN'T MAKE SENSE.

WE BELIEVE THE LANDFILL AS CURRENTLY PROPOSED POSES A SIGNIFICANT RISK TO THE CONTINUED VIABILITY OF OUR OPERATION AND TO ANY OTHER ECONOMIC USE OF THE AREAS IMPORTANT TO MINERAL RESOURCE.

CARGILL HAS A NUMBER OF CONCERNS ABOUT THE SCALE, NATURE, AND ESPECIALLY THE LOCATION OF THE PROPOSED PROJECT. FOR TODAY'S HEARINGS, HOWEVER, I WILL HIGHLIGHT ONLY A FEW OF OUR CONCERNS. THE FIRST ONE IS POTENTIAL CONTAMINATION OF THE BRINE RESOURCE. SECOND IS POTENTIAL IMPACTS ON RECHARGE PATTERNS IN HISTORIC UNDERGROUND BRINE FLOWS. THE THIRD ARE THE LAND-USE CONFLICTS. AND THE FOURTH IS THE SITE SELECTION PROCESS. THESE ISSUES WILL BE COVERED IN MORE DETAIL IN THE WRITTEN COMMENTS WE WILL BE SUBMITTING.

THE GEOLOGIC AND HYDROGEOLOGIC CONCERNS WHICH WILL BE DISCUSSED ABOUT THE PROPOSED LANDFILL ARE BASED ON AN EXTENSIVE REVIEW OF THE PROJECT BY MR. MORRIS BALDERMAN, OUR CONSULTING GEOLOGIST. MR. BALDERMAN IS A CERTIFIED ENGINEERING GEOLOGIST IN THE STATE OF CALIFORNIA, WITH BACKGROUND AND EXPERIENCE IN HYDROGEOLOGIC

AND GEOTECHNICAL CHARACTERIZATION AND SITE SELECTION ANALYSIS FOR WASTE DISPOSAL. THIS REVIEW OF THE DRAFT EIR/EIS AND SUPPORTING DOCUMENTS HAVE IDENTIFIED A NUMBER OF TECHNICAL AND PROCEDURAL FAILINGS THAT RAISE SERIOUS QUESTIONS ABOUT THE VALIDITY OF THE DOCUMENT'S CONCLUSIONS. AS A RESULT OF THESE FAILINGS, WE BELIEVE THE PROJECT APPLICANTS HAVE SERIOUSLY UNDERESTIMATED BOTH THE EXTENT OF THE MINERAL RESOURCE AT RISK AND THE IMPACT ON THE EXISTING ECONOMIC USES OF THOSE RESOURCES.

㊵

THE FIRST INVOLVES THE POTENTIAL FOR CONTAMINATION OF OUR BRINES AND ULTIMATELY OUR PRODUCTS BY LEACHATE FROM THE LANDFILL. BECAUSE WE PRODUCE A FOOD-GRADE PRODUCT THAT INCLUDES PICKLING, CANNING, AND CHEESE-MAKING, THIS OBVIOUSLY IS A VERY SENSITIVE ISSUE FOR US. THE BRINE EXTRACTION PROCESS WE EMPLOY CREATES A CONE OF DEPRESSION DIRECTLY UNDER THE PROPOSED LANDFILL WHICH COULD ENABLE LEAKAGE FROM THE LANDFILL TO FLOW DIRECTLY INTO OUR WELLS.

WE BELIEVE THE APPLICANT HAS FAILED TO ADEQUATELY ASSESS THE HYDROGEOLOGIC AND GEOTECHNICAL ISSUES ASSOCIATED WITH THE LINER FAILURE AND POTENTIAL CONTAMINATION OF THE MINERAL

㊵ CONT.

RESOURCES ON WHICH WE DEPEND. THE DRAFT EIR/EIS AND BACKGROUND TECHNICAL REPORTS INDICATE SEVERAL ISSUES RELATED TO LINER STABILITY HAVE NOT BEEN RESOLVED, SUGGESTING A GREATER POTENTIAL FOR LEAKS THAN TYPICALLY EXPECTED AT A MODERN LANDFILL.

㊶

THESE ISSUES ARE ADDRESSED IN DETAIL IN OUR LETTERS AND MR. BALDERMAN'S LETTERS. DESPITE THE VERY REAL POTENTIAL FOR CONTAMINATION, THE EIR/EIS CASUALLY DISMISSES THE WHOLE ISSUE OF POTENTIAL CONTAMINATION BY OFFERING TO PAY FOR INCREASED PURIFICATION COSTS. THIS IS TOTALLY UNACCEPTABLE. WE PRODUCE PRODUCTS THAT ARE DESTINED FOR HUMAN CONSUMPTION. UNTESTED TREATMENT TECHNOLOGIES ARE NO SUBSTITUTE FOR AVOIDANCE OF THE CONTAMINATION.

㊷

IN THE FOOD INDUSTRY, PERCEPTION CAN BE AS IMPORTANT AS REALITY. THE MERE SUGGESTION THAT OUR PRODUCT HAS BEEN TAINTED, REGARDLESS OF THE TECHNICAL FEASIBILITY OF THIS UNKNOWN TREATMENT PROCESS, COULD EASILY COST US OUR MARKET SHARE.

IN ADDITION TO THE POTENTIAL FOR DIRECT CONTAMINATION OF OUR BRINE SOURCE, THE SCALE AND LOCATION POSE AN ADDITIONAL RISK TO OUR ABILITY TO ACCESS THIS BRINE. THE APPLICANT'S INVESTIGATION HAS PAID LITTLE OR NO ATTENTION TO THE POTENTIAL

FOR CONSOLIDATION OF THE SOILS BELOW THE LANDFILL DUE TO THE SHEER WEIGHT OF THIS MASSIVE STRUCTURE. WE ARE VERY CONCERNED THAT THE CONSOLIDATION OF THE SOFT SOILS BELOW THE SOUTHWESTERN PART OF THE LANDFILL COULD ACT AS AN OBSTACLE TO RECHARGE PATTERNS OF THE LAKE BED AND ㊸ INTERRUPT THE HISTORIC UNDERGROUND BRINE FLOW. WE FEAR THAT BOTH THE QUALITY OF THE RESOURCE AND OUR ACCESS TO IT WILL BE GREATLY IMPAIRED IF THE PROJECT IS ALLOWED TO GO FORWARD AS CURRENTLY PROPOSED.

THE THIRD ISSUE IS THE LAND-USE CONFLICTS. AMONG THE STATED GOALS OF BOTH THE CALIFORNIA DESERT CONSERVATION AREA PLAN AND THE SAN BERNARDINO COUNTY GENERAL PLAN IS A DESIRE TO PROTECT AND PRESERVE MINERAL RESOURCES FOR BENEFICIAL USES AND TO ENSURE THAT ANY NEW PROJECTS ARE COMPATIBLE WITH EXISTING USES OF ADJACENT PROPERTIES. THESE ARE APPROPRIATE AND LAUDABLE GOALS FOR THE REASONS STATED IN THE EIR/EIS. AND I QUOTE, "WHILE MOST LAND USES HAVE OPTIONS AS TO THE LOCATION FOR SITE DEVELOPMENT, MINERAL EXTRACTION IS LIMITED TO THE SITES WHERE MINERALS OCCUR. THEREFORE, IT IS IMPORTANT FOR MINERAL RESOURCES TO BE PROTECTED AND MANAGED SO

AS NOT TO BE LOST DUE TO THE ENCROACHMENT OF INCOMPATIBLE USES." THE PROPOSED LANDFILL CLEARLY IS NOT COMPATIBLE WITH AN ADJACENT USE THAT RELIES ON THE QUALITY AND THE QUANTITY OF THE EXISTING ㊹ MINERAL RESOURCE TO PRODUCE A FOOD PRODUCT. OUR OPERATION IS SITE-SPECIFIC. A LANDFILL IS NOT.

THE FINAL AND FOURTH ISSUE IS WE QUESTION THE VALIDITY OF THE SITE COLLECTION PROCESS. IT APPEARS TO HAVE IMPROPERLY DISMISSED ALTERNATIVE SITES THAT MAY HAVE BEEN MORE APPROPRIATE FOR THIS TYPE OF PROJECT. AS A RESULT, THE EIR/EIS GIVES ㊺ THE INACCURATE IMPRESSION THAT THE IMPACTS AT THIS LOCATION ARE NEEDED IN ORDER TO REALIZE THE BENEFITS OF THE PROJECT. WE STRONGLY SUGGEST THAT THE SITE LOCATION BE RECONSIDERED TO AVOID IMPACTS, IMPACTING IMPORTANT MINERAL RESOURCES AND EXISTING BENEFICIAL USES OF THOSE RESOURCES.

THANK YOU FOR YOUR CONSIDERATION OF OUR COMMENTS.

UNIDENTIFIED SPEAKER: CAN I --

MR. READ: THANK YOU. ACTUALLY, THIS IS A HEARING. WE ARE NOT TAKING QUESTIONS AT THIS TIME. YOU CAN TALK AFTER THE MEETING. THANK YOU. MR. BALDERMAN.

MR. BALDERMAN: THANK YOU, SIR. MY

NAME IS MORRIS BALDERMAN, THAT'S BALDERMAN. I AM FROM DANA POINT, CALIFORNIA.

UNIDENTIFIED SPEAKER: CAN'T HEAR YOU.

MR. BALDERMAN: I SAID I AM FROM DANA POINT, CALIFORNIA. AND I AM A GEOLOGIST. I AM A CONSULTANT IN ENGINEERING IN ENVIRONMENTAL GEOLOGY. I AM A CALIFORNIA REGISTERED GEOLOGIST AND CERTIFIED ENGINEERING GEOLOGIST. AND MY EXPERIENCE INCLUDES MANAGING AND WORKING ON PROJECTS TO SELECT SITES FOR WASTE DISPOSAL FACILITIES AND TO INVESTIGATE THE SITES TO DETERMINE WHETHER OR NOT THEY MEET THE APPLICABLE REQUIREMENTS FOR SUITABILITY.

NOW, I HAVE REVIEWED A NUMBER OF IMPORTANT PARTS OF THE DRAFT EIR/EIS AND I HAVE FOUND THEM TO BE INCOMPLETE AND INADEQUATE. I WAS CONTACTED BY CARGILL SALT TO DO THIS REVIEW. I WAS INITIALLY CONTACTED IN 1991 TO REVIEW THE INFORMATION THAT WAS THEN AVAILABLE AND TO LOOK AT THE POTENTIAL FOR WHETHER THE PROPOSED LANDFILL COULD AFFECT THE EXISTING BRINE WELLS. CARGILL WANTED THIS EVALUATION BECAUSE THEY WERE CONCERNED WHEN THEY LEARNED OF THE PROJECT. AS SHOWN ON

THIS MAP THE PROPOSED LANDFILL IS TO BE IMMEDIATELY ADJACENT TO THE EXISTING BRINE WELLS. I UNDERSTAND THAT THE PREVIOUS LAYOUT ACTUALLY WOULD HAVE HAD THE LANDFILL COMING ON TOP OF THE BRINE WELLS, WHICH WOULD HAVE CLEARLY REMOVED THEM FROM FURTHER USE.

I HAVE PREPARED TWO REPORTS FROM THIS REVIEW. THE FIRST IS A TEN-PAGE LETTER THAT'S INCLUDED IN APPENDIX "A" OF THE DRAFT EIR/EIS, AND THE SECOND IS TO BE SUBMITTED AS A WRITTEN COMMENT ON THE EIR/EIS. NOW, I WON'T TAKE UP THE TIME NECESSARY TO GO THROUGH ALL THE POINTS COVERED IN THESE WRITTEN COMMENTS, BUT I WOULD LIKE TO TALK ABOUT A COUPLE OF KEY POINTS RELATING TO EFFECTS OF THE PROPOSED LANDFILL ON THE EXISTING BRINE WELLS AND TO OVERALL ADEQUACY OF A COUPLE OF OTHER IMPORTANT ITEMS IN THE DRAFT EIR/EIS.

THE FIRST CONCERN -- FIRST CONCERN THAT I'LL TALK ABOUT IS THE QUESTION OF THE EXIST- -- POTENTIAL FOR THE EXISTING BRINE WELLS TO BE CONTAMINATED IF THE LANDFILL WERE TO LEAK. AND THIS POSSIBILITY IS RECOGNIZED. THE DRAFT EIR/EIS DOES MENTION IT AND TAKES THE APPROACH THAT THE LANDFILL WON'T LEAK BECAUSE OF ITS EXCELLENT LINER SYSTEM.

I'VE GOT THIS -- THIS IS A DIAGRAMATIC CROSS-SECTION SHOWING THE RELATIONSHIP OF THE PROPOSED LANDFILL, THE EXISTING BRINE WELLS. THE ACTUAL DIMENSION HERE, THIS IS ABOUT 400 YARDS. THE BRINE WELLS ARE AT THIS LOCATION, ABOUT 300 FEET DEEP, AND HAVE BEEN IN PLACE FOR A NUMBER OF YEARS PRODUCING BRINE FOR THE SALT FACILITY. THE GENERAL GROUNDWATER FLOW, THE FLOW OF BRINE TO THESE WELLS IS GENERALLY FROM NORTH TO SOUTH AND WILL PASS UNDERNEATH THE PORTION OF THE LANDFILL. CLEARLY, IF THE LANDFILL WERE TO LEAK, THERE'S A POTENTIAL FOR ANY HAZARDOUS MATERIAL, ANY CONTAMINATION TO SHOW UP IN THESE WELLS.

㊻ NOW, IN REVIEWING THE DRAFT EIR/EIS AND THE SUPPORTING TECHNICAL DOCUMENTS, I FOUND A NUMBER OF IMPORTANT ISSUES REGARDING STABILITY OF THE FOUNDATION UNDERNEATH THE PROPOSED LANDFILL LINER IN THE PARTICULAR AREA -- PARTICULARLY IN THE AREA CLOSEST TO THE EXISTING BRINE WELLS THAT AREN'T RESOLVED ADEQUATELY.

BRIEFLY, THIS INCLUDES, ONE, A POSSIBILITY THAT SETTLEMENT IN THE SOILS UNDERNEATH THIS PART OF THE LANDFILL APPEARS TO HAVE BEEN UNDERESTIMATED. SECONDLY, THE POTENTIAL FOR DIFFERENTIAL SETTLEMENT, WHICH CAN BE

㊻ CONT.

IMPORTANT IN THIS AREA, ISN'T TREATED. IT'S GENERALLY DISMISSED. DIFFERENTIAL SETTLEMENT IS THE PHENOMENA YOU'VE GOT WHEN SOME PARTS OF THE SOIL SETTLE MORE THAN OTHERS. THIS IS A POTENTIAL HAZARD TO YOUR LINER OR TO ANY OTHER ENGINEERED STRUCTURE, BECAUSE IT INDUCES STRESSES ON THE LINER, STRESSES ON THE STRUCTURE. IF THE STRESSES ARE GREATER THAN DESIGNED FOR, THERE'S A HIGHER POTENTIAL FOR FAILURE.

㊼ THE PARTICULAR EARTHQUAKE EFFECTS IN THE SOFT SOIL IN THIS PART OF THE LANDFILL AREN'T ADDRESSED IN THE DRAFT EIR/EIS OR IN THE SUPPORTING DOCUMENTS. THERE'S SURFACE FISSURES THAT HAVE BEEN MAPPED ON THE LAKE BED TRENDING TOWARDS THE LANDFILL, AND THESE ARE LEFT UNRESOLVED IN THE DRAFT EIR/EIS AND ITS SUPPORTING DOCUMENTS. THEIR NATURE HASN'T BEEN DETERMINED AND SIGNIFICANCE FOR THE LANDFILL HASN'T BEEN DETERMINED.

THERE'S A FAULT IN THE SUBSURFACE THAT'S BEEN MAPPED BY A RAIL CYCLE GEOPHYSICAL CONSULTANT. THE SIGNIFICANCE OF THIS HAS NOT BEEN EVALUATED. AND THERE IS A REGIONAL FAULT MAP BY THE STATE OF CALIFORNIA TRENDING TOWARDS THE AREA OF THE LANDFILL THAT HASN'T BEEN ADDRESSED. EACH

OF THESE COMMENTS IS DISCUSSED FURTHER IN MY WRITTEN COMMENT, BUT, IN SUMMARY, BECAUSE OF THESE UNCERTAINTIES, THE POTENTIAL FOR DAMAGE TO THE LINER AND RESULTING LEAKS FROM THE LANDFILL APPEARS TO BE GREATER THAN WOULD BE EXPECTED AT A MODERN LANDFILL AND THESE ISSUES HAVE TO BE RESOLVED. ㊽

I UNDERSTAND THAT RAIL CYCLE HAS BEEN DOING SOME ADDITIONAL WORK ON SOME OF THESE QUESTIONS, AT LEAST PARTLY IN RESPONSE TO REQUIREMENTS FROM THE REGIONAL WATER QUALITY CONTROL BOARD. THE REPORTS OR ADDITIONAL WORK NEED TO BE RELEASED, NEED TO BE PUT OUT FOR THE SAME REVIEW PROCESS AS THE REST OF THE MATERIAL RELATING TO THE EIR/EIS IN ORDER FOR THIS TO BE A COMPLETE DOCUMENT, COMPLETE EVALUATION. ㊾

SECOND CONCERN IS THE QUESTION THAT THE PROPOSED LANDFILL COULD AFFECT BRINE PRODUCTION EVEN IF IT DOESN'T LEAK. JUST FROM THE PHYSICAL EFFECTS OF LINING 2100 ACRES OF LAND, BUILDING A FILL OVER THE TOP OF IT, THERE'S A POTENTIAL FOR CHANGING THE GROUNDWATER FLOW IN THE AREA OF THE BRINE WELLS AND AFFECTING THE EXISTING PRODUCTION. AND THIS EFFECT GENERALLY ISN'T COVERED IN THE DRAFT EIR/EIS. WHERE IT IS ㊿

ADDRESSED, THE EVALUATIONS DON'T APPEAR TO BE TECHNICALLY VALID. AND THESE PROBLEMS ARE DISCUSSED FURTHER IN THE WRITTEN COMMENTS.

BUT BASICALLY THE PROBLEM IS THAT RAIL CYCLE HASN'T DONE THE INVESTIGATION NEEDED TO INVESTIGATE THE EFFECTS ON THE BRINE WELLS. THEY HAVEN'T EVEN INVESTIGATED THE SUBSURFACE TO THE DEPTH OF THE BRINE WELLS. AS SHOWN ON THIS CROSS-SECTION, THE BRINE WELLS ARE ABOUT 300 FEET DEEP. THE DEEPEST WELL OR BORING THAT RAIL CYCLE HAS PUT IN THAT AREA IS ABOUT 120 FEET DEEP. IN THIS AREA, YOU ARE AT THE MARGIN OF THE LAKE BED, SO GEOLOGICALLY YOU ARE IN A TRANSITION BETWEEN THE LAKE SEDIMENTS ON THE SOUTH AND YOUR ALLUVIUM COMING IN FROM THE MOUNTAINS ON THE NORTH. AND THAT'S SHOWN DIAGRAMATICALLY ON THIS CROSS-SECTION. ㊿ CONT.

IN THIS SORT OF ENVIRONMENT, IT'S NOT POSSIBLE TO KNOW WHAT'S IN PLACE BELOW THE BOTTOM OF YOUR BORING. IF YOU'VE DRILLED A 100-FOOT BORING, YOU FLAT DON'T KNOW WHAT'S BETWEEN THE BOTTOM OF YOUR BORING AND THE BOTTOM OF THE BRINE WELLS. AND THIS ISSUE, OF COURSE, IS IMPORTANT. THE ISSUE OF EFFECTS ON THE BRINE WELLS ARE IMPORTANT FOR COMPLETENESS AND ADEQUACY OF THE

(50) CONT.

EIR/EIS, BECAUSE WITHOUT EVALUATING IMPACTS ON THE EXISTING BRINE PRODUCTION IT ISN'T POSSIBLE TO MAKE A REASONABLE DETERMINATION OF THE BENEFITS VERSUS THE DETRIMENTS OF THE PROJECT.

THE EVALUATION OF MINERAL RESOURCE AT THE SITE IS ANOTHER QUESTION -- ANOTHER ASPECT OF THE DRAFT EIR/EIS THAT DID NOT APPEAR TO BE ADEQUATE. THIS IS IMPORTANT MORE TO THE GENERAL COMPLETENESS OF THE EVALUATION THAN TO THE SPECIFIC EFFECTS ON THE CARGILL WELLS, BUT IT IS A -- I THINK DOES GIVE A PICTURE OF THE COMPLETENESS AND ADEQUACY OF THE REPORT.

(51)

NOW, AS YOU NOTICE, THERE'S EXISTING BRINE WELLS AT THE SITE THAT ARE 300 FEET DEEP. THIS IS INFORMATION THAT WAS KNOWN TO B.L.M. AND TO RAIL CYCLE. RAIL CYCLE, AS DESCRIBED IN THE EIR/EIS, EVALUATED BRINE RESOURCES ON THEIR PROPERTY BY DRILLING TO 200 FEET, OR ABOUT TWO-THIRDS THE DEPTH OF THE EXISTING PRODUCTION.

THE REPORT THAT WAS PUT OUT ON THAT SAID THAT THE BRINES DIDN'T QUITE MEET THE REQUIREMENTS THAT B.L.M. -- THE CRITERIA THAT B.L.M. SPECIFIES FOR ECONOMIC RESOURCES, BUT DID NOTE THAT THE CONCENTRATIONS WERE INCREASING AS THEY WENT DEEPER, WHICH, OF COURSE, YOU'D EXPECT SINCE THERE

(51) CONT.

IS EXISTING PRODUCTION AT 300 FEET. AND IT DOESN'T TAKE A -- IT DOESN'T TAKE A REAL HEAVY-DUTY GEOLOGIST OR EVEN A GEOLOGIST AT ALL TO KNOW IF YOU ARE GOING ON A PROPERTY TO EVALUATE RESOURCES AND YOU KNOW THAT YOUR NEIGHBOR'S GOT AN ECONOMIC RESOURCE AT 300 FEET, THAT THAT'S THE DEPTH YOU OUGHT TO BE TESTING AT.

SO IT LOOKS LIKE THERE'S NEED FOR ADDITIONAL EVALUATION OF THE RESOURCES AT THE SITE, ONCE AGAIN, IN ORDER TO DO A COMPLETE AND ADEQUATE EVALUATION OF THE IMPACTS TO THE PROJECT, BE ABLE TO PROPERLY WEIGH THEM AGAINST THE BENEFITS.

THE LAST THING I WILL TALK ABOUT BRIEFLY IS THE SITE SELECTION PROCESS. AND SITE SELECTION, OF COURSE, IS ANOTHER ISSUE THAT'S IMPORTANT FOR OVERALL COMPLETENESS AND ADEQUACY OF THE REPORT, BUT IT ALSO BEARS ON THE CARGILL SITUATION, BECAUSE IT LOOKS AT THE QUESTION OF WHETHER THE IMPACTS TO THE SALT PRODUCTION -- IMPACTS ON SALT PRODUCTION FROM PUTTING IN THE PROJECTS ARE A NECESSARY CONSEQUENCE OF HAVING WHATEVER BENEFITS ARE DETERMINED TO COME FROM THE PROJECT.

NOW, LOOKING AT THE DESCRIPTION OF THE

(52) SITE SELECTION PROCESS IN THE DRAFT EIR/EIS, THERE'S NO MENTION OF A THOROUGH REGIONAL STUDY -- REGIONAL SURVEY TO SELECT -- SELECT ALTERNATIVES. IT APPEARS THAT THEY STARTED OUT WITH SOME PRESELECTED SITES, BASED ON A STUDY SOMEONE ELSE DID A FEW YEARS AGO, AND ARRIVED AT AMBOY THROUGH THAT, RATHER THAN LOOKING COMPREHENSIVELY AT THE ENTIRE AREA AVAILABLE.

(53) IN ADDITION, THERE'S LARGE AREAS THAT WERE EXCLUDED MAINLY BECAUSE THE RAILROAD DOESN'T PRESENTLY OWN THE LAND. NOW, I CAN UNDERSTAND THE RAILROAD'S VIEWPOINT IN -- IN RUNNING THE PROJECT THAT WAY, BUT IN LOOKING AT THE OVERALL ALTERNATIVES FOR THE PROJECT AS PART OF THE EIR/EIS PROJECT -- PROCESS, YOU HAVE TO LOOK AT THE DIFFICULTY OF ACQUIRING THE LAND AND LOOK AT OTHER SOURCES. AND I WOULD SAY IN MY EXPERIENCE MOST PROJECTS OF THIS SCALE THAT I'VE WORKED ON, THE OWNERS GO INTO IT WITH THE INTENTION OF POSSIBLY ACQUIRING SOME PROPERTY.

(54) NOW, THE ALTERNATIVE SITES THAT ARE PRESENTED IN THE DRAFT EIR/EIS GENERALLY HAD UNACCEPTABLE ENVIRONMENTAL CONDITIONS GOING IN. THIS TENDS TO SKEW THE SITE SELECTION, THE RELATIVE EVALUATION PROCESS. AND WITHOUT A

(54) CONT. COMPREHENSIVE REGIONAL STUDY AND WITHOUT WEIGHING SOME OF THESE ALTERNATIVES, SUCH AS ACQUIRING ADDITIONAL LANDS OR MAKING SOME SITE IMPROVEMENTS PUTTING IN ROADS ON SOME OF THE EXISTING PARCELS, IT DOESN'T APPEAR TO ME THAT YOU HAVE A PROPER EVALUATION OF YOUR ALTERNATES. AND CLEARLY, THE EIR/EIS CAN'T BE CONSIDERED COMPLETE AND ADEQUATE UNTIL YOUR ALTERNATIVES HAVE BEEN EVALUATED PROPERLY.

SO IN SUMMARY, I HAVE NOTED A NUMBER OF AREAS THAT I BELIEVE ARE IMPORTANT WHERE THE DRAFT EIR/EIS WAS EITHER INADEQUATE OR INCOMPLETE. SOME OF THESE ARE RELATED SPECIFICALLY TO CARGILL BRINE WELLS. OTHERS RELATE TO THE OVERALL REPORT. I BELIEVE ALL SHOULD BE ADDRESSED IN ORDER TO HAVE A COMPLETE AND ADEQUATE DOCUMENT. AND ADDITIONAL DETAIL IS PROVIDED IN THE WRITTEN REPORTS. THANK YOU.

MR. READ: THANK YOU. JANE WILLIAMS.

MS. WILLIAMS: FIRST OF ALL, I HAVE A QUESTION FOR THE HEARING EXAMINER. THAT IS, THE HEARING IS SCHEDULED TO BE FROM 7 O'CLOCK TO 9 O'CLOCK. AND I AM WONDERING IF PEOPLE ARE NOT DONE TESTIFYING, IF YOU WILL EXTEND THE TIME.

MR. READ: BECAUSE OF THE

2.6-85

INTERRUPTION, WE WILL ADD TEN MINUTES TO THE TIME, BUT WE DO NEED TO FINISH AT TEN PAST. SO MAYBE WE SHOULD TRY TO LIMIT OUR COMMENTS TO FIVE MINUTES, NO MORE THAN FIVE MINUTES.

MS. WILLIAMS: I'D LIKE TO START OUT -- I WOULD LIKE TO START OUT WITH A QUOTE FROM CHIEF SEATTLE IN 1883. HE WAS VERY PROPHETIC. HE SAID, "YOU WILL DROWN IN YOUR OWN RESIDUE."

THREE WEEKS AGO, THE SCIENTISTS OF THE WORLD, ALL OF THE LIVING NOBEL LAUREATES THAT HAVE WON NOBEL PRIZES IN SCIENCE ISSUED A WARNING TO HUMANITY. THE WARNING SAYS THAT THE WORLD'S LEADERS MUST INSTITUTE MAJOR ENVIRONMENTAL POLICY CHANGES IN THE NEXT DECADE IF THEY ARE TO AVOID UNTOLD HUMAN MISERY.

LADIES AND GENTLEMEN, RAIL CYCLE DOES NOT REPRESENT A CHANGE IN POLICY. IT IS JUST ANOTHER NAIL IN THE COFFIN. IT CONTINUES A PATTERN OF ENVIRONMENTAL DEGRADATION THAT IS THREATENING TO DESTROY OUR CIVILIZATION.

THERE ARE SERIOUS FLAWS IN THIS ENVIRONMENTAL IMPACT REPORT. THEY HAVE BEEN -- MANY OF THEM HAVE BEEN ADEQUATELY COVERED BY OTHER TESTIMONY, SO I WILL JUST BRIEFLY GO THROUGH THEM.

(55) THE HYDROLOGY ISSUES ARE, OF COURSE, FRIGHTENING. THESE LINERS LEAK. THAT IS JUST A WELL-KNOWN FACT. THE STRUCTURE OF THE DUMP, OF THE ACTUAL PILE OF TRASH, WILL NOT BE PATENT.

(56) THE THING THAT HAS CONCERNED US VERY, VERY MUCH ON THE HYDROLOGY ISSUES IS THE WORK OF DR. CARL AUSTIN, DR. JIM WHEELAND, AND CARL MOORE, WHO WERE HYDROLOGISTS AND GEOLOGISTS THAT WORK FOR THE COASTAL GEOTHERMAL PLANT AT CHINA LAKE NAVAL AIR WEAPONS CENTER. THE WORK THAT THEY HAVE DONE HAS BEEN VERY COMPLETE AND IT STRONGLY SUGGESTS THAT THE AQUIFERS OF THE EASTERN MOJAVE AREA ARE ALL INTERLINKED, THAT THEY STORE MASSIVE AMOUNTS, IN THE HUNDREDS OF MILLIONS, OF ACRE-FEET OF WATER, AND THAT THEY ARE RECHARGED FROM SNOW RUNOFF FROM THE SIERRA NEVADA MOUNTAINS, AND THAT THEY ALL EVENTUALLY FLOW INTO THE COLORADO RIVER.

SO ALL OF THESE PROJECTS IN THE EASTERN MOJAVE DESERT, THE BROADWELL DRY LAKE -- TWO TOXIC DEPOSITORIES IN ENGLISH SPRINGS, THE BROADWELL DRY LAKE, THE WARD VALLEY PROJECT, THE EAGLE MOUNTAIN PROJECT AND THE AMBOY TRASH TRAIN ARE ALL A THREAT TO THE WATER SUPPLY FOR THE ENTIRE SOUTHWEST UNITED STATES.

I CANNOT EMPHASIZE ENOUGH THAT

ENVIRONMENTAL PROBLEMS ARE ECONOMIC PROBLEMS. I AM AN ECONOMIST SPECIALIZING IN ENVIRONMENTAL ISSUES. WE ARE LITERALLY FORFEITING OUR FUTURE WHEN WE CONSIDER PROJECTS LIKE RAIL CYCLE.

(57) ANOTHER AREA OF GREAT CONCERN ARE THE SEISMIC ISSUES. WE ARE LOOKING AT PUTTING A HUGE FREESTANDING TRASH PILE ON TOP OF ONE OF THE MOST SEISMICALLY ACTIVE AREAS IN THE ENTIRE WORLD. BARSTOW IS SLATED FOR AN 8 EARTHQUAKE IN THE NEXT 30 TO 50 YEARS. THE LANDERS QUAKE, THE BIG BEAR QUAKES ARE ALL SUGGESTING THAT THE SAN ANDREAS FAULT MAY BE TAKING A NEW ROUTE THROUGH WHAT'S CALLED THE EASTERN MOJAVE SHEER ZONE. SO WHEN YOU START TALKING ABOUT THE KINDS OF PRESSURES AND STRESSES ON A FREESTANDING TRASH PILE LITERALLY THOUSANDS OF ACRES, I THINK THAT THE -- IT DOESN'T TAKE A ROCKET SCIENTIST TO FIGURE OUT THIS IS PROBABLY NOT A GOOD IDEA.

(58) AGAIN, WHEN WE LOOK AT PROJECTS LIKE THIS WHERE YOU HAVE BASICALLY A -- THE EIR WAS NOT EVEN SPECIFIC. I WOULD IMAGINE IT'S A 100-YEAR MONITORING PLAN. THESE ARE SIMILAR TO THE MONITORING PLANS ON THE OTHER PROPOSED PROJECTS BY WASTE MANAGEMENT, BROWNING PHARRIS FOR OUR DESERT, THAT YOU ARE GOING TO STACK TRASH FOR 60 TO

(58) CONT. HOWEVER MANY YEARS, DO SOME SORT OF 100-YEAR MONITORING PLAN, THEN WALK AWAY AND LEAVE IT THERE. THIS IS JUST SIMPLY NOT ACCEPTABLE. I BELIEVE THAT ALTHOUGH TRASH COMPANIES MAY NOT BE AROUND IN 100 YEARS, BUT THERE CERTAINLY WILL BE SOME OF US LEFT, HOPEFULLY.

(59) THE BIODIVERSITY ISSUES, OF COURSE, ARE WELL KNOWN. THE DESERT TORTOISE IS ON THE BRINK OF EXTINCTION. PROJECTS LIKE WARD VALLEY, THE AMBOY TRASH TRAIN, EAGLE MOUNTAIN, ARE CERTAINLY GOING TO BE THE FINAL THING THAT PUSHES THEM OVER THE BRINK, AS WELL AS WE HAVE SPECIES THAT HAVE NOT YET BEEN LISTED AND HAVE NOT YET BEEN IDENTIFIED BUT THAT ARE DEFINITELY AT RISK.

SCIENTISTS ARE TELLING US THAT IN THE NEXT 50 YEARS, WE ARE GOING TO SEE 50 PERCENT OF SPECIES IN THE WORLD ON THE BRINK OF EXTINCTION. AND, AGAIN, IT IS JUST THESE TYPES OF PROJECTS THAT WE ARE FIGHTING.

(60) MY COMMENTS ON THE B.L.M. WE SEE AN ALARMING TREND. THE BUREAU OF LAND MANAGEMENT BASICALLY SQUANDERING THE RESOURCES OF THE PUBLIC. THIS PARTICULAR PROJECT IS CATEGORY "L," DESIGNATED IN B.L.M. AS BEING CATEGORY "L," WHICH IS LIMITED USE, WHICH MEANS THERE SHOULD BE NO

2.6-87

(61) TYPES OF HAZARDOUS WASTE. AND, LADIES AND GENTLEMEN, IT IS ONLY APPARENT THAT WHEN YOU HAVE DUMPS LIKE THIS YOU GET INKS, YOU GET PLASTICS, MUCH LESS THE THINGS THAT GET IN DUMPS THAT ARE ALREADY ILLEGAL. THIS WILL END UP BEING A HAZARDOUS WASTE DUMP. CERTAINLY, THE B.L.M.'S CATEGORY "L," WHICH IS LIMITED USE, IS NOT CONSISTENT. IT'S NOT A CONSISTENT LAND USE.

(62) THE B.L.M. WOULD ALSO HAVE TO PROVE THAT THERE IS SOME SORT OF OUTSTANDING PUBLIC GOOD IN ORDER TO TRANSFER THIS LAND FOR THE USE BY A PRIVATE CORPORATION FOR THE USE AS A TRASH DISPOSAL FACILITY. AND I THINK THAT WE WOULD BE VERY HARD-PRESSED AS A CIVILIZATION TO SAY THAT THE -- THIS IS SOME SORT OF PUBLIC BENEFIT.

(63) AB-939 MANDATES BY LAW THE REDUCTION BY 1995 OF 20 PERCENT, I BELIEVE IT IS, OF TRASH AND 50 PERCENT BY THE YEAR 2000, LOOKING AT SOMETIME IN THE MID-21ST CENTURY HAVING A 90 PERCENT REDUCTION AND RECYCLING OF ALL TRASH. (64) UNFORTUNATELY, AB-939 ALSO GAVE A MONOPOLY TO COMPANIES LIKE WASTE MANAGEMENT AND BROWNING PHARRIS. IT IS THIS MONOPOLISTIC COMPETITION THAT ACTUALLY PROVIDES THE DISINCENTIVE FOR TRASH RECYCLING AND THE REDUCTION OF TRASH.

(65) WHEN YOU HAVE TWO COMPANIES LIKE B.L. -- LIKE BROWNING PHARRIS, WHICH IS BASICALLY TRYING TO SITE THE EAGLE MOUNTAIN LANDFILL, AND YOU HAVE WASTE MANAGEMENT TRYING TO SITE THIS ONE, ALTHOUGH IT MAY APPEAR THAT THEY ARE COMPETING, THEY HAVE BEEN CONVICTED IN PENNSYLVANIA OF NATIONWIDE ANTITRUST VIOLATIONS.

AS AN ECONOMIST, AS I LOOK AT THE PROBLEMS OF OUR SOCIETY FROM AN ENVIRONMENTAL POINT OF VIEW, THE REDUCTION IN RECYCLING OF TRASH IS A FRIGHTENING ONE. WE SEEM TO BE A CIVILIZATION THAT CAN'T GET OUT OF THEIR OWN WAY TO THIS ISSUE. IT SEEMS AS THOUGH THE INDIVIDUAL CONSUMER OR THE USER OF TRASH SERVICES WANTS TO REDUCE THEIR TRASH AND WANTS TO RECYCLE, BUT YET THERE IS NO SORT OF INCENTIVE THERE. ONE CAN ONLY LOOK AT THE COMPELLING ECONOMICS WHEN YOU STUDY THE ISSUE AND YOU REALIZE THAT THERE'S ONLY A 10 PERCENT RETURN ON RECYCLING OPERATIONS CURRENTLY NATIONWIDE, BUT YET THERE'S A 40 PERCENT RETURN ON TRASH.

SO UNTIL WE AS A SOCIETY CHANGE THOSE BASIC ECONOMIC INCENTIVES, WE ARE GOING TO BE CONTINUALLY BOMBARDED WITH PROJECTS LIKE THIS.

FURTHERMORE, PROJECTS OF THIS NATURE PUT

2.6-88

AN UNDUE EMPHASIS ON THE IMMEDIATE PRESENT. THE USE OF THE CAPITALIZED PRICING MODEL AND THE PRESENT-VALUE THEORY IN ECONOMICS SKEWS ALL INVESTMENT DECISIONS TOWARDS THE PRESENT AND NOT TOWARDS THE FUTURE. UNTIL WE TACKLE THAT PARTICULAR PROBLEM AND WE GET PEOPLE THINKING MORE INTO THE FUTURE AND MORE INTO THE IMPACTS THAT THESE TYPES OF PROJECTS WILL HAVE ON THE FUTURE, I IMAGINE WE WILL BE SITTING IN THESE ROOMS HAVING A LOT MORE HEARINGS.

I JUST WANT TO MAKE NOTE FOR THE PUBLIC RECORD THAT THE WORLD'S LEADERS HAVE BEEN ASKED TO SIGN A BILL OF RIGHTS FOR FUTURE GENERATIONS. ENVIRONMENTALISTS ARE COMING TO UNDERSTAND THAT THE NUCLEAR AGE BROUGHT WITH US AN AGE OF FUTURELESSNESS, THAT THE VERY SPLITTING OF THE ATOM BROUGHT WITH IT ITS OWN HUBRIS, ITS OWN PUNISHMENT IN THE FORM OF NOT ONLY NUCLEAR WASTE BUT A SORT OF CATHARSIS AMONG PEOPLE THAT THERE IS NO FUTURE. AND I WOULD SUBMIT TO YOU THAT IF WE KEEP MAKING DECISIONS THINKING THAT THERE IS NO FUTURE, IT'S GOING TO BECOME A SELF-FULFILLING PROPHESY.

ONE OF THE AREAS THAT FURTHER CONCERNS ME ARE THE NUMEROUS HUMAN AND CIVIL RIGHTS VIOLATIONS

THAT GO ALONG WITH PROJECTS OF THIS NATURE. LAST YEAR WAS THE NATIONAL CONFERENCE HELD BY VICTIMS OF ENVIONMENTAL VIOLENCE. MANY PEOPLE HAVE BEEN THE VICTIMS OF ASSAULTS, PHONE TAPS, HAD THEIR HUMAN AND CIVIL RIGHTS COMPROMISED IN FIGHTING PROJECTS OF THIS NATURE. I WANT TO MAKE SURE THAT I PUT INTO THE PUBLIC RECORD THAT I BELIEVE PROJECTS OF THIS NATURE THAT ARE COMPLETELY AND TOTALLY INSANE FROM AN ENVIRONMENTAL POINT OF VIEW, FROM ANY SORT OF PUBLIC BENEFIT, HOW CAN IT EVEN GET TO THIS POINT? ONE CAN ONLY ASK WHY SUCH A POORLY DESIGNED PROJECT COULD EVEN BE DISCUSSED DURING THE -- GIVEN THE CURRENT STATE OF THE ENVIRONMENT, AND IT ONLY LEADS ONE TO ASK IF OUR DEMOCRACY IS NOT BEING COMPROMISED.

I WOULD LIKE EVERYONE TO THINK ABOUT THAT. THANK YOU FOR THE CHANCE TO GIVE MY COMMENTS.

MR. READ: THANK YOU. CAROLYN WALTON.

MS. WALTON: MY NAME IS CAROLYN WALTON, W A L T O N. MY FAMILY HAS LIVED IN THE APPLE VALLEY AREA SINCE 1937. I CONSIDER MYSELF TO BE PRETTY MUCH OF A DESERT RAT.

I AGREE WITH QUITE -- MANY OF THE

2.6-89

COMMENTS MADE BY THE PEOPLE IN THIS ROOM, BUT I BELIEVE THAT IN THE END CONSIDERING THAT WE ARE GOING TO BE -- I DON'T WANT TO SAY IT'S A DONE DEAL, BUT I AM LOOKING FOR ENVIRONMENTAL IMPACT MONIES FOR THE COUNTY OF SAN BERNARDINO, BECAUSE IN THE EVENT THAT THIS PROJECT DOES PASS -- NOW, I HEAR A LOT OF PEOPLE COMMENTING AGAINST IT -- I AM A -- I AM A FORMER LEGISLATIVE ADVOCATE. I HAVE BEEN AT MEETINGS THAT WERE STACKED, YOU KNOW, 20 DEEP WITH PEOPLE MAKING VERY ELEQUENT COMMENTS AGAINST PROJECTS, AND THE PROJECTS PASS ANYWAY. SO I AM HERE NEITHER FOR NOR AGAINST THE PROJECT, BUT STRICTLY ASKING FOR ENVIRONMENTAL IMPACT MONIES FOR THE COUNTY OF SAN BERNARDINO, BECAUSE THIS WILL OBVIOUSLY BE IMPACTING OUR DESERT. (66)

WE HAVE MANY PARTS OF THE DESERT THAT ALREADY HAVE ENVIRONMENTAL NEEDS THAT ARE NOT BEING MET BY THE BUREAU OF LAND MANAGEMENT BECAUSE OF A LACK OF FUNDING SOURCES. I KNOW THAT THERE WERE ENVIRONMENTAL IMPACT MEASURES REQUIRED ON THE EAGLE MOUNTAIN PROJECT, AND I WOULD LIKE TO SEE THAT THE SAME KIND OF MONIES ARE AVAILABLE FROM THIS PROJECT FOR THE REST OF SAN BERNARDINO COUNTY. THANK YOU.

MR. READ: JOE OR KAREN PIZZITOLA.

MR. PIZZITOLA: MY NAME IS JOE. MY LAST NAME IS SPELLED P -- AS IN PAUL -- I Z Z I T O L A. I AM A RESIDENT OF NEWBERRY SPRINGS. I HAVE BEEN IN THIS DESERT FOR EIGHT YEARS. I AM HERE BY CHOICE, NOT BECAUSE I HAVE TO BE.

I AM A LOCAL BUSINESSMAN, AND I HAVE A FEW CONCERNS. ONE IS THE ECONOMIC FACTOR IN THIS AREA HERE, WHERE THE FUNDS ARE GOING TO BE SPENT, WHETHER THEY ARE GOING TO BE TAKEN DOWN THE HILL OR KEPT OUT HERE IN THE DESERT AND DISTRIBUTED AMONG THE LOCAL BUSINESS- -- TOWNS. WE ARE IN AN ECONOMIC PROBLEM OUT HERE WHERE WE DON'T GET MONEY MUCH FROM THE COUNTY. OUR FUNDING KEEPS GETTING CUT OFF. AND I AM AFRAID THAT THE MONIES THAT WILL COME IN WILL BE TAKEN DOWN THE HILL AND NOT BE SPENT OUT HERE WHERE IT SHOULD BE SPENT.

I AM NOT AGAINST THE DUMP AND I AM NOT FOR THE DUMP. I AM CONCERNED ABOUT THE RAILROAD CROSSINGS, ESPECIALLY NEWBERRY SPRINGS BY THE AMOUNT OF TRAINS THAT WILL BE TRAVELING THROUGH THERE. WE HAVE A VOLUNTEER FIRE DEPARTMENT, AND WE AREN'T VERY WELL STAFFED. IF THERE'S A FIRE ON THE OTHER SIDE, WHICH IS ACTUALLY NORTH OF THE TRACKS, AND WE NEED TO GET A FIRE ENGINE TO THAT (67)

2.6-90

SIDE, HOW ARE WE GOING TO DO IT IF THE TRAIN IS BLOCKING IT? SAME THING GOES FOR THE SOUTH SIDE. (67) OUR ROADS ARE IN POOR CONDITION, ESPECIALLY ROUTE 66, WHICH RUNS THROUGH THE BOLO AREA. ESPECIALLY IF YOU LOOK FROM NEWBERRY SPRINGS DOWN THROUGH TO LUDLOW, THE ROAD IS IN EXTREMELY POOR CONDITION. (68) AND FROM LUDLOW TO AMBOY IS IN EVEN WORSE CONDITION. THE COUNTY HAS RESLURRIED PORTIONS OF IT COMING UP FROM TWENTY-NINE PALMS IN THE PAST FEW YEARS. THAT IS A MAIN THOROUGHFARE FOR THE PEOPLE THAT COME UP FROM PALM SPRINGS AREA, BANNING, BEAUMONT, EAST INTO SAN BERNARDINO AND EVERYTHING, GOING TO THE COLORADO RIVER, TO LAUGHLIN, AND ALSO SHORTCUTTING UP OVER KELBAKER ROAD UP TO I-15 TO GO TO LAS VEGAS.

I HEARD SOMEBODY SAY THAT THE ROAD IS NOT VERY WELL TRAVELED. I OPPOSE THAT. IT IS EXTREMELY WELL TRAVELED. I DON'T KNOW HOW MANY OF YOU PEOPLE HERE HAVE BEEN OUT TO THE BOLO SITE OR EVEN KNOW WHERE IT IS. I HAVE HEARD PEOPLE FROM L.A. SPEAKING OUT AGAINST IT, BUT I CHALLENGE EVERYBODY TO ACTUALLY GO THERE AND SEE, TO ACTUALLY GO THROUGH THE AREA TO SEE WHAT IT IS LIKE, TO STOP IN THE LOCAL COMMUNITIES THAT THIS WILL BE AFFECTING ALONG THE WAY AND SEE WHAT KIND

OF SERVICES THAT THEY REALLY NEED THROUGH THERE. IT TAKES AN AVERAGE OF AN HOUR AND A HALF FOR AN AMBULANCE TO GET FROM NEEDLES OR FROM TWENTY-NINE PALMS TO THAT AREA. I KNOW THIS FOR A FACT. THE FIRE DEPARTMENT WOULD HAVE TO COME UP FROM WONDER VALLEY, OR OUT OF NEWBERRY SPRINGS, OR THE HOLE IN THE WALL, OR OUT OF NEEDLES. (69)

I HAVE HEARD THE SIERRA CLUB SAY THEIR SPIELS. I DON'T THINK TOO MUCH ABOUT THEM BECAUSE THEY ARE TRYING TO LOCK THE DESERT UP SO NOBODY CAN HAVE ANY ENJOYMENT OUT OF IT. I'VE HEARD SOMEBODY SAY ABOUT THE ENVIRONMENTAL HAZARDS AND ET CETERA. AND, YES, THERE'S HAZARDS AND WE NEED TO LOOK AT OTHER ALTERNATIVES, BUT THE TRASH HAS TO GO SOMEWHERE AND IT'S GOING TO WIND UP WITH US NO MATTER WHAT. WE HAVE BECOME THE DUMPING GROUND. WE HAVE WARD VALLEY, WE HAVE B.K.K. AT LUDLOW, WHICH IS ACTUALLY BROADWELL, AND WE HAVE HIDDEN VALLEY. I HAVE FIRST-HAND EXPERIENCE WITH B.K.K., BECAUSE I GREW UP IN THE TOWN OF WEST COVINA. I WAS PLAYING IN THE B.K.K. DUMP BEFORE IT WAS THE DUMP. I'VE SEEN WHAT THEY'VE DONE. I'VE BEEN IN TRASH DUMPS WHEN I WORKED FOR THE CITY OF REDONDO BEACH AS A MECHANIC. I'VE SEEN THE DUMPS DUG UP AND SEEN WHAT'S LEFT FROM WAY

2.6-91

BACK IN THE TWENTIES. SO I HAVE A PRETTY GOOD EXPERIENCE OF THAT.

AND THE OTHER THING OF USING THE DESERT TORTOISE IS AN EXCUSE. I THINK THAT PEOPLE NEED TO REALIZE THAT WE ARE COMING OUT OF A DROUGHT OUT HERE. MOTHER NATURE DOES NOT REPRODUCE WHEN THERE'S A DROUGHT. IN THE LAST TWO YEARS, I HAVE SEEN MORE TORTOISES THAN I HAVE SEEN IN THE PREVIOUS FIVE, AND THAT IS BECAUSE WE HAVE NOT HAD THE WATER OUT HERE TO REPRODUCE. AND I HAVE PICKED UP MANY A TORTOISE OFF OF THE HIGHWAY TO MOVE THEM SO THAT THE PEOPLE THAT ARE TRAVELING TO THE RIVER AND LAS VEGAS DON'T USE THEM AS A TARGET AND RUN THEM OVER. I KNOW HOW TO HANDLE A TORTOISE. AND THAT'S ALL I HAVE TO SAY.

MR. READ: THANK YOU. PAUL DAVIS.

MR. DAVIS: YES. MY NAME IS PAUL DAVIS. I AM FROM EL MIRAGE. AND I DECIDED TO COME UP HERE TONIGHT TO SPEAK MY PIECE ON THIS ISSUE.

I AM NOT GOING TO HAVE A PROBLEM WITH THE FIVE MINUTE LIMITATION, BECAUSE FOR THE LAST WEEK I HAVEN'T BEEN ABLE TO SPEAK AT ALL. AND YOU COULDN'T KNOCK THE SMILE OFF MY WIFE'S FACE. I'LL TELL YOU THAT.

BUT ANYWAY, WE'LL GET BACK -- I -- I AM NOT GOING TO DELVE INTO THE ENVIRONMENTAL ISSUES. I WILL LEAVE THAT TO PEOPLE WITH MORE EXPERTISE THAN I HAVE, BUT I WOULD LIKE TO BRING UP TWO POINTS THAT I FEEL THAT ARE VERY IMPORTANT. AND I THINK ONE OF THEM -- ONE IS THE LACK OF INFORMATION TO THE PUBLIC IN THE HIGH DESERT. FOR INSTANCE, I'D LIKE TO ASK A QUESTION AT THIS TIME. HOW MANY PEOPLE FROM THE -- ARE HERE TONIGHT FROM THE VICTORVILLE/APPLE VALLEY/HESPERIA AREA?

GOOD. THAT'S FANTASTIC. I DIDN'T THINK IT WOULD BE THAT MANY, BECAUSE THERE HASN'T BEEN ANY SORT OF INFORMATIONAL MEETINGS AT ALL IN THAT AREA. WE HAVE HAD TO JUST PICK THAT UP FROM JUST READING THE NEWSPAPERS AND SO FORTH. AND I DO BLAME VERY MUCH THE COUNTY, OUR PUBLIC OFFICIALS, AND RAIL CYCLE PEOPLE FOR NOT HAVING THE ISSUE BROUGHT UP IN THE AREA WHERE THIS -- PROBABLY ABOUT 75 PERCENT OF THE POPULATION IN THE HIGH DESERT IS CONCERNED. (70)

WE'VE HAD -- THEY'VE HAD MEETINGS DOWN THERE. RAIL CYCLE HAS HAD MEETINGS. I'VE BEEN TO THREE OF THE CHAMBER OF COMMERCE MEETINGS DOWN THERE WHERE THEY'VE OUTLINED RAIL CYCLE. IT'S

2.6-92

ALWAYS BEEN A VERY BEAUTIFUL PROJECT AT THOSE MEETINGS, AND THE OTHER ISSUES THAT SHOULD HAVE BEEN BROUGHT UP AS TO COST FACTOR, HOW MUCH -- (71) WHAT WE ARE GOING TO RECEIVE AS A UNIT UP HERE IN THE DESERT, ALL THE NECESSARY THINGS HAVEN'T BEEN BROUGHT UP AT ALL. SO I FEEL THAT THIS LACK OF INFORMATION TO THE PEOPLE OF THE HIGH DESERT, WE ALL -- WE ALL BELONG TO THE HIGH DESERT. WE ARE CLEAR OVER AT THE CORNER RIGHT NEAR THE LOS ANGELES COUNTY LINE, BUT WE FEEL WE ARE AS MUCH OF THE HIGH DESERT AS ANYBODY ELSE UP HERE. AND WE LOVE THIS DESERT. AND WE FEEL ECONOMICALLY THAT WE ARE BEING JUST KIND OF PUSHED ASIDE RELATING TO THIS BOLO PROJECT.

THE -- LIKE I SAID, I -- I AM NOT VERY HAPPY WITH OUR LEADERS IN THE COUNTY TO -- I DON'T THINK THEY'VE DONE THEIR JOB IN TRYING TO ARRANGE MEETINGS THAT WOULD RELATE TO THIS PARTICULAR SUBJECT. BACKGROUND LACKING ON WASTE MANAGEMENT AND ATCHISON, TOPEKA, AND SANTA FE. ATCHISON, (72) TOPEKA, AND SANTA FE IS A VERY COLORFUL WORD, AND ALMOST -- YOU JUST KIND OF SEE THE FLAGS WAVING AND EVERYTHING ELSE, BUT WE SHOULD HAVE A BACKGROUND ON THESE PEOPLE. WE SHOULD KNOW THEIR TRACK RECORD. WE SHOULD KNOW WHAT HAPPENS -- WHAT

THEY DO IN ENVIRONMENTAL ISSUES AND HOW THEY -- WHAT THEIR PAST RECORD HAS BEEN.

WASTE MANAGEMENT OF NORTH AMERICA -- AND I'VE READ A FEW OF THE ENVIRONMENTAL MAGAZINES AND SO FORTH. AND ACCORDING TO WHAT THEY'RE SAYING, (72) CONT. THEY HAVE A VERY POOR RECORD. I THINK THIS IS SOMETHING THAT SHOULD BE INVESTIGATED VERY CLOSELY, AND I THINK IT'S SOMETHING THAT WE SHOULD ALL KNOW. WE SHOULD KNOW WHAT WASTE MANAGEMENT OF NORTH AMERICA IS GOING TO DO FOR US UP HERE AND WHAT THEIR BACKGROUND RECORD IS SO THAT WE WILL KNOW WHAT TO EXPECT IN THIS PARTICULAR PROJECT IF IT GOES THROUGH.

I DON'T THINK WE HAVE ENOUGH CONTROL. I DON'T THINK IT'S SPELLED OUT TO WHERE WE WILL HAVE ENOUGH CONTROL IF THIS PROJECT DOES GO THROUGH.

SO I GUESS THAT'S ABOUT ALL I HAVE TO SAY TONIGHT. I AM GLAD WE HAVE THE REPRESENTATION UP HERE FROM THE VICTORVILLE/APPLE VALLEY/HESPERIA/ADELANTO AREA. AND I THINK THAT I WOULD LIKE TO ASK THAT -- I WOULD LIKE TO MAKE REALLY A MOTION -- A MOTION, OF COURSE, ISN'T IN ORDER IN THIS PARTICULAR MEETING TONIGHT, BUT I WOULD LIKE (73) TO MAKE A MOTION TO DELAY FOR AT LEAST THREE MONTHS THIS -- GOING THROUGH THE PROCESS OF

73 CONT.

GOING TO THE SUPERVISORS FOR A VOTE AND IT BE EXTENDED, SAY, THREE TO SIX MONTHS SO THAT THERE COULD BE A LOT OF MEETINGS AND BRING THE PEOPLE INTO IT WHERE THEY COULD TELL THEIR SUPERVISOR AND THEIR COUNTY LEADERS JUST EXACTLY HOW THEY FEEL ABOUT THIS PARTICULAR SITUATION. THANK YOU VERY MUCH.

MR. READ: THANK YOU. GEORGE RICE.

MR. RICE: MY NAME IS GEORGE RICE. IT'S R I C E. I AM THE CHIEF OPERATING OFFICER FOR A COMPANY KNOWN AS CADIZ LAND COMPANY. CADIZ LAND COMPANY IS A PUBLICLY TRADED N.A.S.D. SMALL COMPANY. WE DRAW CAPITAL FROM DOMESTIC AND INTERNATIONAL FINANCIAL MARKETS. AND INCLUDED IN OUR SHAREHOLDER GROUPS ARE INSTITUTIONS AND PENSION FUNDS.

2.6-93

THE MAP THAT MY ASSOCIATE IS HOLDING UP REPRESENTS OUR LAND HOLDINGS IN GREEN. THIS IS THE PROPOSED SITE (INDICATING). THE PROPOSED BOLO LANDFILL THREATENS A VIABLE ECONOMIC ENTERPRISE, I.E. CADIZ LAND COMPANY. WE GROW PREMIER QUALITY TABLE GRAPES AND CITRUS AT OUR LOCATION. CADIZ LAND COMPANY OWNS 26,000 ACRES -- EXCUSE ME. THAT'S 42 SQUARE MILES -- OF LAND LITERALLY NEXT DOOR -- THIS IS ONE MILE -- FROM THE PROPOSED

SITE.

OF THIS 26,000 ACRES, 800 ACRES HAVE ALREADY BEEN DEVELOPED INTO A TABLE GRAPE VINYARD. THAT PROJECT STARTED IN 1986. AN ADDITIONAL 640 ACRES HAVE BEEN SELECTED -- HAVE BEEN PLANTED TO SELECTED VARIETIES OF DESERT CITRUS. AS I SPEAK TO YOU TONIGHT, OUR CITRUS, WHICH IS LOCATED RIGHT HERE IN THIS SECTION (INDICATING), WE JUST FINISHED THE HARVEST OF OUR MINEOLA CROP THIS WEEK. THOSE OF YOU IN THE NEIGHBORHOOD PROBABLY ARE AWARE OF THAT.

AS AN OFFICER OF THIS PUBLICLY TRADED COMPANY, I HAVE A FIDUCIARY RESPONSIBILITY TO INVEST -- TO PROTECT THE INVESTMENT OF OUR SHAREHOLDERS IN THIS UNIQUE AGRICULTURAL OPERATION. PRESERVING THE QUALITY OF OUR WATER SUPPLY AND THE PRISTINE DESERT ENVIRONMENT IS CRUCIAL TO THE INTEGRITY AND THE FUTURE OF OUR SHAREHOLDERS' INVESTMENT.

OUR COMPANY HAS FARMED PREMIUM TABLE GRAPES AND QUALITY CITRUS AT THIS LOCATION FOR OVER THE PAST EIGHT YEARS. OUR SHAREHOLDERS HAVE INVESTED TENS OF MILLIONS OF DOLLARS. WE SEASONALLY EMPLOY HUNDREDS OF PEOPLE AND GENERATE MILLIONS OF DOLLARS OF CROP VALUE ANNUALLY. WE

2.6-94

PROPOSE -- AND WE HAVE APPLICATIONS NOW BEING PROCESSED BY THE COUNTY OF SAN BERNARDINO -- TO EXPAND OUR AGRICULTURAL OPERATION TO 9,600 ACRES. CURRENTLY OUR PLANTED AG OPERATION IS THIS BLOCK, THIS BLOCK AND THIS BLOCK (INDICATING). WE HAVE APPLICATION TO EXPAND THAT TO 9,600 ACRES.

THIS ADDITIONAL INVESTMENT WILL LIKELY TOTAL MORE THAN $50 MILLION AND WILL EMPLOY, WHEN IT'S FULLY MATURE, THOUSANDS OF SEASONAL AND FULL-TIME WORKERS.

TO CONCLUDE MY COMMENTS, WE ARE OUTRAGED BY THE AUDACITY OF THE PROPONENTS OF THIS WASTE DUMP. A WASTE DUMP SITE LOCATED IMMEDIATELY ADJACENT TO A FOOD PRODUCTION OPERATION IS NOT COMPATIBLE. THE DRAFT EIR AND EIS PRESENTED BY THE PROPONENTS OF THIS PROJECT CLEARLY ADMITS (74) SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS TO OUR GROUNDWATER AND AIR QUALITY. RAIL CYCLE PROPONENTS HAVE NEVER COMMUNICATED WITH SENIOR (75) CADIZ LAND COMPANY OFFICIALS, AND THEIR DRAFT ENVIRONMENTAL IMPACT AND ENVIRONMENTAL IMPACT (76) STUDY DOES NOT ADDRESS THE IMPACT OF THE PROPOSED LANDFILL ON OUR OPERATION. THIS TACTIC EITHER (77) REPRESENTS UNPARALLELED ARROGANCE OR INTENTIONAL DECEPTION.

IF THIS PROPOSED LAND EXCHANGE AND SOLID WASTE OPERATION IS ALLOWED TO PROCEED, IT SERIOUSLY THREATENS THE ECONOMIC VIABILITY OF CADIZ LAND COMPANY'S EXISTING OPERATIONS AND PLANS FOR THE FUTURE. CADIZ LAND COMPANY STRONGLY RECOMMENDS THAT IF THIS PROJECT IS NECESSARY, THAT THIS DUMP SITE BE LOCATED ELSEWHERE. THANK YOU.

MR. READ: THANK YOU. BILL BASKIND.

MR. BASKIND: THANK YOU. MY NAME IS BILL BASKIND, B -- AS IN BOY -- A S K I N D -- AS IN DAVID. I LIVE IN VICTORVILLE. MY RECYCLING PLANT IS IN HESPERIA. THE NAME OF MY COMPANY IS GREENTREE PLASTICS TECHNOLOGY.

I AM HERE TONIGHT TO TALK NOT ON THE ENVIRONMENTAL IMPACT STUDIES, WHICH HAVE BEEN -- QUITE A FEW SPEAKERS SPEAKING VERY ELOQUENTLY. I AM GOING TO SPEAK ON A SUBJECT THAT APPEARS TO BE LACKING, AND THAT INVOLVES COMMON SENSE. TO USE -- IT'S QUITE AN ACRONYM. IF COMMON SENSE WAS SO COMMON, EVERYONE WOULD HAVE IT.

IT SEEMS THAT THE -- FIRST OF ALL, THAT THE SUPERVISORS, THE BOARD OF SUPERVISORS ARE ALMOST ACTING IN A SUB-ROSA MANNER. THE DEAL IS ALMOST A DONE DEAL, ALMOST LIKE IT WAS DONE DOWN IN SAN BERN- -- IN RIVERSIDE COUNTY WITH EAGLE

2.6-95

MOUNTAIN. SOMEONE COMES ALONG AND SAYS THEY HAVE 1300 JOBS FOR YOU, $24 MILLION A YEAR. SOUNDS TOO GOOD TO BE TRUE? CHANCES ARE 100 OUT OF 100 IT IS TOO GOOD TO BE TRUE.

I CALLED RAIL CYCLE MYSELF AND ASKED THEM TO SEND ME SOME INFORMATION. THE FIRST M.R.F. IS GOING TO BE IN THE CITY OF COMMERCE AND THAT WILL BE OPERATIONAL IN ABOUT TWO YEARS. ZERO JOBS IN THIS AREA. THE ONLY JOBS MIGHT BE SUPPORT JOBS FOR FLIPPING HAMBURGERS OR MAYBE POURING COFFEE OUT IN AMBOY.

THE $24 MILLION IS GOING TO BE IN THE FORM OF TIPPING FEES. THAT'S THE COST OF DUMPING IN A LANDFILL. HOW MUCH MONEY OF THAT IS GOING TO BE AVAILABLE TO THE COUNTY IS REALLY NOT KNOWN. AT THIS POINT, IT'S VERY NEBULOUS. HOW MUCH MONEY OF THAT $24 MILLION IS GOING TO BE REABSORBED BY RAIL CYCLE FOR MANAGING THE LANDFILL? WELL, I'LL LEAVE ALL THE ECONOMICS TO OTHER PEOPLE. THE MAIN -- MY MAIN THRUST IS TO TALK ABOUT RECYCLING.

RAIL CYCLE PROPOSES ITSELF AS A RECYCLING CORPORATION. I KNOW SOME OF YOU -- I SEE IN THE AUDIENCE TONIGHT -- THAT I MET UP AT THE SPRING VALLEY COUNTRY CLUB WHEN RAIL CYCLE HAD THEIR BIG

SHINDIG A FEW YEARS AGO WHERE THEY TRIED TO BUY EVERYONE WITH SOME SHRIMP COCKTAIL. AT THAT TIME, THEIR BROCHURES SHOWED THAT THEY WERE GOING TO RECYCLE 4 PERCENT OF THE MATERIALS THAT WOULD BE DESTINED FOR THE LANDFILL. FOUR PERCENT. THAT'S -- THAT IS JUST REALLY INCREDULOUS THAT THEY WOULD EVEN TRY AND INSULT OUR INTELLIGENCE. WITHOUT DOING ANYTHING, WE CAN RECYCLE 4 PERCENT.

AB-939, WHICH PASSED IN 1989 AND CREATED THE INTEGRATED WASTE MANAGEMENT BOARD, DEMANDS THAT EVERY COUNTY, EVERY MUNICIPALITY IN THE STATE OF CALIFORNIA REDUCE THEIR LANDFILL USAGE BY 25 PERCENT BY 1995 AND 50 PERCENT BY THE YEAR 2000. REDUCING LANDFILL USAGE DOES NOT MEAN WE MAKE A LANDFILL THAT WILL LAST 100 YEARS. THE WHOLE IDEA IS TO MAKE WHATEVER LANDFILLS WE DO HAVE EXIST FOR A LONGER TIME, NOT TO SITE NEW ONES.

78

UNFORTUNATELY, THE ONLY MATERIALS THAT THEY WILL RECYCLE -- AND, QUOTE, THEY ARE NOT REALLY RECYCLING. WHEN YOU BRING YOUR MATERIALS INTO A M.R.F. OR INTO A RECYCLING CENTER, YOU ARE NOT RECYCLING. ALL YOU ARE DOING IS CHANGING OWNERSHIP. NOTHING GETS RECYCLED UNTIL IT'S TRANSFORMED INTO ANOTHER PRODUCT AND IS SOLD.

2.6-96

PLAIN AND SIMPLE.

THE ONLY THING THAT THEY WILL REMOVE FROM THE WASTE STREAM WILL BE WHAT IS REMOVED RIGHT NOW AT EVERY M.R.F. IN THE STATE OF CALIFORNIA. (79) THAT'S P.E.T. SODA BOTTLES UNDER AB-2020 AND HIGH-DENSITY MILK JUGS, BECAUSE THEY DO HAVE A VALUE. EVERYTHING ELSE WILL BE LANDFILLED.

IF WE WERE TO RECYCLE EVERY SINGLE OUNCE OF P.E.T. AND HIGH-DENSITY MILK JUGS, WE WOULD RECYCLE LESS THAN 2 PERCENT OF ALL THE PLASTICS. PLASTICS IS NOT A BAD WORD. YOU CANNOT HAVE THE LIFESTYLE YOU HAVE TODAY WITHOUT PLASTICS. AND I DON'T WANT TO GET ONTO THAT SUBJECT, BECAUSE I CAN TALK HOURS ON THAT. I'VE BEEN IN THE PLASTICS INDUSTRY FOR OVER 40 YEARS, AND I AM AN ENVIRONMENTALIST ALSO. THOSE TWO ARE VERY COMPATIBLE.

THE -- MORE JOBS CAN BE CREATED BY HAVING LOCAL M.R.F.'S -- AND I ASSUME EVERYONE UNDERSTANDS WHAT A M.R.F. IS. M.R.F. IT'S A MATERIAL RECOVERY FACILITY. MORE JOBS CAN BE GENERATED LOCALLY FROM M.R.F.'S, MORE MATERIALS PULLED OUT OF A LANDFILL FROM INDIVIDUAL M.R.F.'S, INDIVIDUAL RECYCLING CENTERS AND RECYCLED INTO PRODUCTS AND CREATE THE STRONG LOCAL ECONOMIES.

IN ADDITION, I WOULD SUGGEST THAT THE COUNTY IN THE LONG RUN WOULD BE ABLE TO GET MORE TAX DOLLARS OUT OF MORE LOCAL JOBS AND MORE LOCAL BUSINESSES THAN THEY WOULD OUT OF A PROPOSED LANDFILL SUCH AS THE AMBOY SITE.

NOW, TO TALK VERY BRIEFLY ABOUT WASTE MANAGEMENT AND B.F.I. THOSE ARE THE TWO DRIVING FORCES BEHIND EAGLE MOUNTAIN AND THE AMBOY SITE. (80) THE EPA, THE FEDERAL EPA, PUT OUT WHAT THEY CALL A GREEN SHEET. THE GREEN SHEET IS A -- IT LISTS THE VARIOUS ORGANIZATIONS THAT ARE NOT IN COMPLIANCE WITH EPA RULES AND REGULATIONS. B.F.I. AND WASTE MANAGEMENT TAKE TURNS IN HEADING THAT LIST. CURRENTLY, BOTH WASTE MANAGEMENT AND B.F.I. ARE UNDER F.B.I. INVESTIGATION AND HAVE BEEN FOR A NUMBER OF YEARS.

THE -- I CAN'T READ MY NOTES HERE. OKAY.

ONE OF THE PROBLEMS I HAVE -- AND I HAVE A VESTED INTEREST JUST LIKE SOME OF THE OTHER COMPANIES THAT WERE UP HERE TALKING ABOUT THEIR IMPACT -- MY LIFE'S BLOOD IS TAKING THE PLASTICS OUT OF THE TRASH BEFORE IT GOES TO THE LANDFILL. IF WASTE MANAGEMENT IS SUCCESSFUL IN THEIR RAIL CYCLE VENTURE, THOSE PLASTICS WILL BE CONSIGNED TO

2.6-97

THE LANDFILL AND MY COMPANY WILL HAVE A VERY, VERY DIFFICULT TIME IN GETTING THOSE PLASTICS. WE RECYCLE THOSE PLASTICS INTO A PRODUCT CALLED PLASTIC LUMBER THAT IS USED TO FURTHER EXTEND OUT OUR AVAILABLE WOOD RESOURCES, SUCH AS REDWOOD AND PRESSURE-TREATED LUMBER.

WE HAVE TO COME TO ONE VERY, VERY SIMPLE UNDERSTANDING, THAT WE DO NOT HAVE INEXHAUSTIBLE RESOURCES TO PUT INTO THE GROUND MATERIALS THAT CAN BE AND SHOULD BE RECYCLED AND JUST USE OUR RESOURCES INDISCRIMINATELY IS COMPLETELY INDEFENSIBLE. IN 1944 AND 1945, IF WE ALL -- THOSE OF US WHO ARE OLD ENOUGH TO REMEMBER -- GERMANY HAD A RECYCLING -- A WHOLE COMPLETE RECYCLING CENTER UNDER THE BLACK FOREST. WHEN THEY LOST NORTH AFRICA, THEY DID NOT LOSE THEIR OIL CAPACITY. THEY WERE ABLE TO MAKE OIL OUT OF THE COAL FROM THE ALSACE-LORRAINE REGION AND FROM CZECHOSLOVAKIA.

IF -- THOSE OF US WHO UNDERSTAND WHAT SANDION (PH.), THE PHILOSOPHER, SAID, "THOSE OF US WHO DO NOT LEARN FROM HISTORY ARE CONDEMNED TO REPEAT IT."

THE TECHNOLOGY THAT IS AVAILABLE AND IS BECOMING AVAILABLE WILL BE SHUT DOWN AND

COMPLETELY UNAVAILABLE TO US, THE CITIZENRY OF THIS COUNTRY, IF WE ALLOW PROJECTS LIKE RAIL CYCLE TO CONTINUE. WE HAVE TO BECOME AVAILABLE -- WE HAVE TO LET THESE TECHNOLOGIES SEE THE LIGHT OF DAY AND HELP US TAKE THE -- YOU KNOW, SOLVE THESE PROBLEMS. RAIL CYCLE AND, IN A SENSE, B.F.I. AND WASTE MANAGEMENT ARE ACTING LIKE THE 800-POUND GORILLA. THEY ARE GOING TO DO ANYTHING THEY WANT, BECAUSE WHERE I COME FROM NEW YORK THERE'S AN OLD EXPRESSION: "MONEY TALKS AND EVERYONE ELSE IS GOING TO WALK." PLAIN AND SIMPLE.

SO I AM COMPLETELY AGAINST THIS RAIL CYCLE SETUP. THERE HAS TO BE A BETTER WAY TO DO THIS. BUT THE PROBLEM IS, IF RAIL CYCLE SUCCEEDS, IT'S NOT GOING TO DO ANYTHING FOR OUR SOLID WASTE PROBLEMS UP HERE. RAIL CYCLE IS DESIGNED TO HELP THE CITY OF L.A. AND THE COUNTY OF LOS ANGELES, PERIOD. IF YOU FOLLOW THROUGH THE HISTORY OF RAIL CYCLE, IT WAS ORIGINALLY DEVELOPED AS A CONCEPT BY SGAC, WHICH IS THE SAN GABRIEL ASSOCIATION OF CITIES. THEY DEVELOPED THIS -- AND THEY FOUND THAT THE ONLY WAY TO GET RID OF THE GARBAGE -- TO SOLVE THE GARBAGE PROBLEM WAS TO TRUCK IT OFF AND PUT IT IN SOMEONE ELSE'S BACKYARD. WELL, I HAVE ONLY BEEN UP IN THE DESERT FOR A YEAR, BUT I CAN

2.6-98

TELL YOU THAT THIS DESERT IS -- IF IT'S ALLOWED TO GO THE WAY RAIL CYCLE WANTS IT AND, APPARENTLY, THE WAY THE BOARD OF SUPERVISORS WANT IT TO GO, WE WILL HAVE ANOTHER LOS ANGELES UP HERE. AND I MOVED OUT OF LOS ANGELES FOR SEVERAL REASONS, ONE OF WHICH I LIKE TO BREATHE. I DON'T LIKE TO BREATHE AIR I CAN SEE. SO I -- IF MY VOICE HAS ANYTHING TO SAY ABOUT IT, I THINK EACH AND EVERY ONE OF YOU SHOULD PRESSURE YOUR SUPERVISORS, SHOULD PRESSURE YOUR LOCAL REPRESENTATIVES, STATE, AND YOUR CONGRESS TO MAKE SURE THIS RAIL CYCLE NEVER SEES THE LIGHT OF DAY. THANK YOU.

MR. READ: THANK YOU. DONALD REACHERT.

MR. REACHERT: I AM DONALD REACHERT, R E A C H E R T. I AM THE C.E.O. OF TOTAL WASTE CONVERSION.

I AM A LARYNGECTOMEE SO, NEEDLESS TO SAY, I HAVE TO USE AN ELECTRONIC DEVICE TO SPEAK WITH. I WOULD LIKE TO SAY THIS: I DIDN'T GET MY CANCER FROM RUBBISH OR OTHER THINGS. I THINK I DID IT TO MYSELF SOMEWHERE ALONG THE LINE JUST BY LIVING. BUT I WOULD LIKE TO SAY THAT WE HAVE BEEN WORKING IN THE RUBBISH BUSINESS SINCE 1972. WE ORIGINALLY HAD THE ORANGE COUNTY LANDFILLS WHERE WE DID

RECYCLING AND RESOURCE RECOVERY THAT WAS FOUND IN THOSE DAYS. WE HIRED A LOT OF PEOPLE. WE KNOCKED THE SEAGULLS OUT OF THE WAY AND WE WENT IN AND WE TOOK OUT EVERY USEFUL ITEM THAT WE COULD TAKE.

THE NET RESULT IS WE ALSO BUILT THE FIRST M.R.F., TO OUR KNOWLEDGE, IN 1974 THAT WAS USED ON THE ORANGE COUNTY LANDFILLS. SO I DO KNOW WHAT I AM TALKING ABOUT WHEN IT COMES TO LANDFILLS.

I WOULD LIKE TO STRESS THE POINT THAT THERE IS TECHNOLOGY IN EVERY FIELD THAT YOU PEOPLE ARE DISCUSSING UP HERE TONIGHT. THERE IS WAYS AND MEANS OF RECYCLING AND SEPARATING THE RUBBISH WHERE YOU ONLY WIND UP WITH 10 PERCENT INNARDS, WHICH BASICALLY CONSISTS OF GRAVEL, BROKEN GLASS, AND A FEW OTHER THINGS. AND LIKE THE MAN FROM GREENTREE THERE -- I HAPPEN TO KNOW HIM FROM A FEW YEARS BACK -- EVERY PIECE OF THAT CAN BE UTILIZED.

ONE OF THE MISCONCEPTIONS YOU PEOPLE KEEP TALKING ABOUT IS THE FACT THAT THERE'S GOING TO BE 85,000 TONS A DAY OF RUBBISH HEADING SOMEWHERE, WHETHER IT GOES TO WASTE MANAGEMENT OR THE B.F.I. GROUP. I'VE WORKED WITH ALL OF THEM. THEY'RE NOT REALLY THE BANDITS, AND THEY'RE BEING MADE IT. HOWEVER, THEY ALSO CAN LEARN THE NEW TECHNOLOGY

THAT IS AVAILABLE THAT WOULD CLEAN UP THIS WHOLE PROJECT. WE NOW HAVE WAYS THROUGH GADGEMENTATION (PH.) SYSTEMS THAT ARE NONPOLLUTING.

I HAVE A FRIEND THAT DEVELOPED MORE SANTA FE'S (INAUDIBLE). IT WAS A POLLUTION DEVICE FOR LOCOMOTIVES, SOME 2500-HORSEPOWER CATERPILLAR EARTHMOVING EQUIPMENT THAT COMPLETELY DISSIPATED ALL POLLUTANTS. THAT TYPE OF EQUIPMENT IS OUT THERE. WHAT I WOULD SUGGEST YOU PEOPLE DO IS TAKE THE COMPANIES THAT ARE IN THIS BUSINESS -- AND I HAPPEN TO BE ONE OF THEM, AND I KNOW WHAT MY JOB IS, IF I LIVE LONG ENOUGH TO ACCOMPLISH IT. MY JOB IS TO CLEAN IT UP.

2.6-99

I KNOW PETER BURK. (UNINTELLIGIBLE) TO FIND OUT IF AMBOY WAS IN THE DESERT PROTECTION BILL FROM DIANE FEINSTEIN, OUR NEW SENATOR, AND I GOT A FAX THIS MORNING THAT NO, IT IS NOT IN THE DESERT PROTECTION ACT. SO THAT ELIMINATES THAT PROBLEM.

THE THING IS THAT WE ALL -- AND I AM AS GUILTY AS YOU ARE -- CREATE ALL OF THIS RUBBISH. WE HAVE A LOT OF MANUFACTURERS OUT THERE THAT ARE HELPING US TREMENDOUSLY THAT THEY'VE COME UP WITH MORE AND MORE PACKAGING. WHAT ARE YOU GOING TO DO WITH IT? IT'S GOT TO GO SOMEPLACE.

SO IN THE DAYS OF RAIL CYCLE, IT'S NOT 85,000 TONS A DAY THAT WOULD BE ADDED UP THE (UNINTELLIGIBLE) TO AMBOY. IT WOULD BE 10 PERCENT. IF THEY GOT DOWN TO BUSINESS AND USED ALL OF THE LATEST TECHNOLOGY AVAILABLE, THAT WOULD HELP RECYCLE ALL OF THESE PRODUCTS.

ALSO, YOU HAVE TO REALIZE THAT WHEN RECYCLING CAME IN IN 1986, A LOT OF PEOPLE IGNORED IT. NOW THEY'RE BEGINNING TO PAY ATTENTION TO IT. BY THE SAME TOKEN, THE MARKET IS NOT THERE. AND YOU HAVE TO GENERATE NEW TECHNOLOGY TO MAKE IT ALL WORK. I HAVE TECHNOLOGY AVAILABLE TODAY THAT I CAN TAKE ALL OF THE WASTEPAPER, WHAT WE CALL JUNK PAPER, AND THE PLASTIC, AND I CAN TURN IT INTO MAPS, DIESEL FUEL OR METHANOL TO BE USED IN THE AUTOMOBILES.

SO WHAT IT ALL BOILS DOWN TO, GET BEHIND THE PEOPLE THAT HAVE TO HANDLE THIS. IT'S NOT AN EASY JOB. BUT INSIST THAT THEY GO THE WHOLE GAUNTLET AND ONLY SEND 10 PERCENT TO THAT LANDFILL. AND THEY DON'T EVEN NEED TO DO THAT IF THEY WANT TO PUT IT IN CEMENT BLOCKS AND VARIOUS OTHER PRODUCTS THAT IS AVAILABLE AND CAN BE UTILIZED IN OUR EVERYDAY LIVING. I THANK YOU.

MR. READ: THANK YOU. STEPHEN

AHMANN?

MR. AHMANN: MY NAME IS STEVE AHMANN. IT'S A H M A N N. THAT'S A HARD ACT TO FOLLOW. THAT GENTLEMAN HAD A LOT OF VERY INTELLIGENT THINGS TO SAY, IT APPEARED TO ME.

AS I HAVE BEEN SITTING HERE TONIGHT, I HAVE BEEN ASKING MYSELF THE QUESTION, ARE WE NUTS? AM I REALLY HEARING THIS STRAIGHT? CAN WE AFFORD TO -- WE CAN'T AFFORD, EVIDENTLY, TO BUILD A HIGH-TECH TRAIN THAT WOULD TAKE 2- TO 3,000 PEOPLE EVERY DAY FROM BARSTOW TO FT. IRWIN ROUND-TRIP, BUT WE CAN AFFORD TO BUILD A TRAIN THAT WOULD TAKE TRASH 120 MILES FROM LOS ANGELES OUT HERE TO THE MIDDLE OF THE DESERT. NOW, THAT AMAZES ME.

I AM NEW HERE, SO I CAN'T SAY THAT I HAVE BEEN IN THE DESERT UMPTEEN THOUSAND YEARS, BECAUSE I HAVEN'T BEEN. I HAVE BEEN LIVING IN THE DESERT FOR A LONG TIME, JUST NOT THIS PARTICULAR ONE.

I FIND IT AMAZING THAT WE ARE GOING TO MOVE TORTOISES, WE ARE GOING TO MOVE KIP FOXES, WE ARE GOING TO MOVE ALL THAT TO MAKE ROOM FOR TRASH. I READ IN THE ENVIRONMENTAL IMPACT STATEMENT THAT TORTOISES THAT WERE SIGHTED BY CONSTRUCTION WORKERS WOULD BE RELOCATED APPROPRIATELY. WHAT THE HECK DOES THAT MEAN? TRASH IN, TORTOISE OUT?

JOE EARLIER SAID THAT TRASH HAS TO GO SOMEPLACE. THAT'S A REAL DEFEATIST ATTITUDE IF YOU SIMPLY REGARD IT AS TRASH. AS I SAID, THE GENTLEMAN THAT JUST SPOKE, I THINK -- I HOPE SHED A NEW LIGHT ON THAT. RAIL CYCLE WANTS YOU TO THINK THAT IT HAS TO GO SOME PLACE. RAIL CYCLE WANT YOU TO THINK THAT -- THAT YOU HAVE ALREADY LOST THIS, THAT YOU HAVE NO CHOICE IN THIS, THAT IT'S A DONE DEAL.

IN SPITE OF THE EXPENSES THAT THEY ARE GOING TO PUT OUT TO DO THIS, ACCORDING TO THE ENVIRONMENTAL IMPACT STATEMENT, THEY ARE GOING TO MAKE A LOT OF MONEY ON THIS. WHAT ARE THOSE EXPENSES? WELL, THEY ARE GOING TO BUILD A REGIONAL COLLECTION SEPARATION CENTER. THEY ARE GOING TO HIRE PEOPLE TO SEGREGATE THE TRASH. THEY ARE GOING TO BUILD A FACILITY OUTSIDE AMBOY COMPLETE WITH GROUNDWATER BEING USED TO COVER UP THE TRASH. OUR GROUNDWATER.

A LITTLE ASIDE ON THAT. THAT GROUNDWATER COMES FROM THE SIERRAS. IT FLOWS THROUGH FROM THE SIERRAS UNDERGROUND ON ITS WAY TO THE COLORADO RIVER. THE BIG PROBLEM IS THAT ONCE THAT SEAL IS (81)

BROKEN IN THAT DUMP, THE STUFF IN THAT DUMP IS GOING TO GO TO THE COLORADO RIVER, AND ON DOWN AND CONTINUE TO POLLUTE. NOT GOING TO BE FUN. AND THAT'S REAL, AND THAT WILL HAPPEN. BECAUSE SOONER OR LATER, THAT SEAL WILL BREAK. I DON'T CARE WHAT THEY DO. IT WILL, ONE WAY OR ANOTHER.

THEY ARE GOING TO HAVE AIR POLLUTION PROBLEMS. THEY ARE GOING TO HAVE ENDANGERED SPECIES PROBLEMS. THEY ARE GOING TO HAVE DUST PROBLEMS. THEY ARE GOING TO HAVE A PLETHORA OF MITIGATING MEASURES, ALL THINGS THAT THEY HAVE TO PAY A LOT OF MONEY FOR. THEY ARE GOING TO BUILD TRAIN CARS. THEY ARE GOING TO LOAD THAT TRAIN. THEY ARE GOING TO MOVE IT 120 TO 150 MILES OUT HERE INTO THE DESERT. THEY ARE GOING TO UNLOAD THAT TRAIN INTO THAT DUMP. AND THEY'RE STILL GOING TO MAKE MONEY ON IT IN SPITE OF SPENDING ALL THAT. THAT AMAZES ME; OUT OF TRASH. IT MUST MEAN THERE'S A LOT OF MONEY IN THAT TRASH, SEEMINGLY, SOMEHOW. I DON'T THINK IT TAKES A DEGREE IN TRASHOLOGY TO FIGURE THAT OUT.

I THINK IT IS JUST THE TIP OF THE ICEBERG. I THINK ONCE THEIR FOOT IS IN THE DOOR, I THINK IT'S GOING TO BE EASIER AND EASIER TO SAY, "BOY, WE NEED TO MOVE THIS UP THERE. THIS

2.6-101

HAZARDOUS WASTE NEEDS TO BE MOVED ON UP THERE." AND THEN, "WELL, WE MIGHT AS WELL MOVE THE NUCLEAR STUFF UP THERE TOO, BECAUSE WE'VE ALREADY GOT THE HAZARDOUS STUFF." I THINK THAT YOU ARE ASKING FOR A LOT OF TROUBLE IF YOU ONCE OPEN THE DOOR. THERE ARE OTHER SOLUTIONS TO THIS, SOLUTIONS THAT WE CAN ALL HELP TO FIND AN ANSWER TO.

SEVERAL PEOPLE TONIGHT HAVE SAID THAT THE ENVIRONMENTAL IMPACT STATEMENT, THIS BOOK -- AND I INTENDED TO BRING IT UP WITH ME, BUT MY BUDDY BORROWED IT A SECOND SO I DON'T HAVE IT TO WAVE AROUND. IT'S QUITE A BOOK. THEY SAID THE DOCUMENT IS FLAWED, AND THEY'RE RIGHT.

MY JOB HAPPENS TO BE ONE OF LOOKING INTO ENVIRONMENTAL IMPACT STATEMENTS. I AM SUPPOSED TO BE ABLE TO WRITE THEM. SOMETIMES I WONDER. BUT ONE OF THE PRIME REQUIREMENTS OF AN ENVIRONMENTAL IMPACT STATEMENT -- IT HAS TO DO THREE THINGS: IT HAS TO CONSIDER THE ALTERNATIVES. HAS TO. THAT'S THE PURPOSE OF THE DOCUMENT, IS TO CONSIDER ALTERNATVIES. ONE HAS TO BE THE NO-ACTION ALTERNATIVE. THEY DID THAT; RIGHT? THAT'S IN THERE. IF YOU'VE SEEN IT, THEY CONSIDERED THAT.

ONE HAS TO BE ANOTHER ALTERNATIVE THAT'S SIMILAR IN NATURE. THAT'S IN THERE TOO. "WHAT IF

WE JUST MOVE IT DOWN THE ROAD A FEW MILES?" THAT'S IN THERE.

(82) THE THIRD ONE ISN'T IN THERE. THEY HAVE TO CONSIDER SOMETHING ELSE, SOME OTHER KIND OF NEW TECHNOLOGY, SOME OTHER KIND OF ISSUE THAT'S TOTALLY POSSIBLY OUTLANDISH, BUT THEY HAVE TO CONSIDER IT. THEY HAVE NOT DONE THAT. I AM SORRY, BUT BY THE NATIONAL -- NATIONAL ENVIRONMENTAL POLICY ACT, THAT MEANS THAT THAT DOCUMENT IS FLAWED FATALLY. IT IS NOT A VALID DOCUMENT. THEY NEED TO START ALL OVER AND REWRITE IT. I'M SORRY. IT'S AS SIMPLE AS THAT. AND THEY MIGHT AS WELL GET STARTED, BECAUSE SIERRA CLUB, IF THEY'VE GOT ANY TESTICLES, WILL TAKE THEM TO COURT ON THAT. AND I THINK SIERRA CLUB DOES AND WILL.

TO GIVE YOU AN EXAMPLE OF WHAT I'M TALKING ABOUT, JUST WHAT IF THEY DECIDED THAT THEY WERE GOING TO TAKE ALL THE HOMELESS IN L.A. AND EMPLOY THEM SEPARATING THE TRASH AND RECYCLING IT? THAT SOUNDS LIKE AN OUTLANDISH IDEA, DOESN'T IT? WELL, MAYBE IT IS. MAYBE IT ISN'T. I DON'T KNOW. JUST ONE I HAPPENED TO THINK OF SITTING HERE. IT'S A TOTALLY DIFFERENT WAY OF LOOKING AT SOLVING THE PROBLEM. THAT'S WHAT THEY HAVEN'T DONE HERE TONIGHT. AND THAT'S WHAT THEY NEED TO

DO. THANKS FOR LISTENING TO ME. I APPRECIATE IT.

MR. READ: THANK YOU. JOHN CURRY.

MR. CURRY: THANK YOU VERY MUCH. I AM -- AGAIN, MY NAME IS JOHN CURRY. I LIVE HERE IN BARSTOW. I WORK OUT AT FT. IRWIN AT THE HOSPITAL. I AM CHIEF OF SERVICES OUT THERE.

FOR THE PAST FOUR YEARS, I WAS INVOLVED IN DEVELOPING A WATER MANAGEMENT PLAN AT FT. IRWIN, LOOKING INTO INVESTIGATING OUR AQUIFERS AND ENSURING THAT WE DON'T MINE WATER BEYOND OUR REPLENISHABLE RATES THAT WE PULL OUT OF THE GROUND SO THAT WE DON'T VIOLATE NATURE'S LAWS AND TAKE ANY WATER OUT.

AND MY MAIN CONCERN IN THIS THING IS WATER. AND I WOULD LIKE TO POINT OUT A COUPLE OF THINGS TO YOU, IF I MAY. FIRST OF ALL, I WOULD NOT DISAGREE THAT WE HAVE TO COME UP WITH SOME KIND OF A PLAN TO MANAGE WASTE. AND I THINK THAT WHATEVER WE DO, IT'S GOING TO BE A VERY EXPENSIVE PROPOSITION, WHETHER IT'S IN L.A. OR WHETHER IT'S BARSTOW. AND WE ARE JUST NOW BEGINNING TO LEARN OF THE KINDS OF IMPACTS THAT WASTE AND LANDFILLS ARE HAVING ON THE ENVIRONMENT AND PARTICULARLY ON OUR WATER SUPPLY SYSTEMS.

I WOULD FIRST LIKE TO SAY THAT JUST BECAUSE IT'S BEING LOCATED ADJACENT TO A DRY LAKE BED -- NAMELY, BRISTOL LAKE -- THAT WOULD FIRST SEND OUT SOME ALARMS, BECAUSE IN ORDER FOR US TO KNOW WHAT'S GOING TO HAPPEN IN BRISTOL LAKE AS A RESULT OF THIS LANDFILL, THERE'S A LOT OF THINGS THAT NEED TO BE DONE BEFORE WE CAN EVEN BEGIN SITE LOCATION OF A LANDFILL.

(83) THE FIRST THING IS -- IS THAT WE NEED TO DO AN AQUIFER STUDY OUT THERE. WE NEED TO PUT IN SOME WELLS THAT WILL TELL US THE DIRECTION OF FLOW, OF UNDERGROUND FLOW, THE TRANSMISSIVITY OF THE SOILS IN THE AREA, AND TO ESTABLISH SOME KIND OF PLAN AS TO WHAT WE'RE GOING TO DO IN THE EVENT THAT WE DO HAVE A TRAGIC SPILL AT THIS PARTICULAR LANDFILL SITE.

BRISTOL LAKE IS A HUGE DRAINAGE BASIN. IT'S VERY BIG. THAT MEANS THAT THERE'S A LOT OF WATER UNDER THE GROUND OUT THERE. AND WE HAVE BEEN DISCOVERING ALL KINDS OF THINGS IN RELATIONSHIP TO UNDERGROUND WATER HERE. WE HAVE A LOT OF FAULTS OUT HERE. AND WATER TENDS TO FOLLOW THOSE FAULTS. WE HAVE A TERRIFICALLY CHANGING ENVIRONMENT THAT'S UNDER CONSTANT CHANGE, AS WE KNOW, FROM EARTHQUAKES AND SO FORTH, AS WE HAVE

RECENTLY EXPERIENCED. ALL OF THESE THINGS NEED TO BE TAKEN INTO SERIOUS CONSIDERATION.

(84) I WOULD INVITE YOU TO LOOK AT THIS DRAFT ENVIRONMENTAL IMPACT REPORT, ENVIRONMENTAL IMPACT STATEMENT THAT WAS PREPARED, TO PAGE 352 AND 353, PARAGRAPH 3.3.3.3, PARAGRAPH 1 UNDER THAT SECTION, "GROUNDWATER MONITORING. A HYDROGEOLOGICAL MODEL BASED ON FINDINGS OF THE GROUNDWATER SITE CHARACTERIZATION WILL BE USED TO DEVELOP A GROUNDWATER MONITORING NETWORK OF BACKGROUND AND DETECTION MONITORING POINTS IN CONSULTATION WITH THE R.W.Q.C.B. A SERIES OF GROUNDWATER MONITORING WELLS WILL BE PLACED IN UPGRADIENT AND DOWNGRADIENT LOCATIONS TO FACILITATE DETECTION OF POSSIBLE POLLUTION" -- OR "POLLUTANT CONCERNS."

OKAY. LET'S STOP RIGHT THERE AND JUST POINT OUT TO YOU AGAIN, UNTIL WE HAVE PUT IN SOME PIEZOMETER WELLS OUT THERE TO DETECT TRANSMISSIVITY AND DIRECTION OF FLOW, WE REALLY DON'T KNOW WHERE TO PLACE MONITORING WELLS. YOU WON'T KNOW WHAT DEPTH TO PUT THEM AT. YOU WON'T KNOW ANYTHING ABOUT IT UNTIL YOU DEFINE THE AQUIFER ENTIRELY. YOU NEED TO FIND THE BOTTOM OF THE AQUIFER AND YOU NEED TO FIND THE PERIMETER OF THE AQUIFER, AND THEN YOU DECIDE WHERE YOU ARE

GOING TO LOCATE THAT LANDFILL SITE.

THIS IS A VERY SERIOUS CONSIDERATION HERE. WE COULD BE POLLUTING FAR DOWNSTREAM, ALL (85) THE WAY INTO THE COLORADO RIVER. AND WE ARE ALREADY DUMPING JILLIONS OF TONS OF WASTE INTO THE COLORADO RIVER THAT'S BEING -- COSTING US MILLIONS OF DOLLARS TO CLEAN UP GOING INTO MEXICO. AND THOSE PLANTS HAVE ALREADY BEEN ESTABLISHED BASED UPON WHAT WE'VE BEEN POLLUTING NOW. AND NOW WE ARE TALKING ABOUT ADDING THINGS THAT CAN POSSIBLY IMPACT THAT. WE DON'T KNOW THAT IT WILL IMPACT IT. WE DON'T KNOW WHAT THE CONSEQUENCES OF THESE THINGS ARE.

AND, OF COURSE, YOU KNOW, IN THE INTEREST OF MINIMIZING COSTS, WE ALWAYS APPROACH THINGS FROM THIS STANDPOINT WHEN WE ARE TALKING ABOUT THINGS FROM A GOVERNMENTAL AGENCY STANDPOINT. SO WE ARE GOING TO MINIMIZE COSTS IN ORDER TO MAXIMIZE OUR PROFITS. AND THAT'S ONE APPROACH TO THE ECONOMIC MODEL.

THE POINT OF THE FACT IS, YOU KNOW, IS WE IN MANY CASES DON'T WANT TO SPEND THE AMOUNT OF MONEY THAT'S NECESSARY UP FRONT TO DETERMINE FULL IMPACT BEFORE WE DO THESE THINGS. IT'S VERY IMPORTANT THAT WE DO THAT. THE EAST COAST IS FULL

OF PROBLEMS LIKE THIS; MAJOR CITIES. THEIR UNDERGROUND SYSTEMS ARE TOTALLY POLLUTED FROM THIS KIND OF THING. AND WE DON'T NEED TO DO THAT ANYMORE. THERE IS THE TECHNOLOGY. THERE IS THE SCIENCE TO KNOW AND FIND OUT WHAT THE IMPACTS OF THESE KINDS OF THINGS ARE GOING TO DO.

I WILL POINT OUT ANOTHER ONE. PARAGRAPH 3.3.3.4., "SURFACE WATER MONITORING. RUN-ON TO THE LANDFILL WILL BE DIVERTED TO THE APPROXIMATE 150-FOOT-WIDE EARTHEN PERIMETER CHANNEL AND RELEASED ONTO THE PLAYA." (86)

WE ARE TALKING ABOUT RELEASING RUNOFF WATER THAT'S GOING INTO THE SITE DIRECTLY ON TOP OF THE FOCAL POINT OF THE DRAINAGE BASIN. BY THE WAY, THIS 150-FOOT-WIDE EARTHEN PERIMETER CHANNEL IS NOT LINED. DOES IT IMPACT IT? IT SAYS HERE, "RUNOFF FROM CLOSED OR COMPLETED PORTIONS OF THE LANDFILL WILL BE COLLECTED IN A DIVERSION CHANNEL THAT FLOWS TO A SEDIMENTATION BASIN PRIOR TO RELEASE ONTO THE PLAYA. MONITORING WILL BE IN ACCORDANCE WITH W.D.R.S. TREATMENT PRIOR TO RELEASE IS NOT EXPECTED SINCE THIS STORMWATER WILL NOT BE AFFECTED BY LANDFILL OPERATION." HOW DO WE KNOW THAT? AGAIN, HAVE WE DONE ANY STUDIES TO (87) DETERMINE WHAT THE TRANSMISSIVITIES ARE, THE

(87) CONT. DIRECTION OF FLOW? HAVE WE DONE ANY OF THAT? THERE HAVEN'T BEEN ANY OF THOSE STUDIES DONE IN THIS AREA, TO MY KNOWLEDGE. IF THERE HAVE BEEN, I'D LIKE TO SEE THEM. (88) AND I'D LIKE FOR THEM TO BE PRESENTED AT THESE MEETINGS RATHER THAN SAYING IN FRONT OF THESE BOOKS THAT IF WE'D LIKE TO SEE ANY OF THIS STUFF THEN WE CAN WRITE OFF TO SO AND SO AND GET IT. WHEN IT'S GOING TO AFFECT THE ENVIRONMENT WE LIVE IN, WE NEED TO BE PRESENTED WITH ALL OF THE INFORMATION UP FRONT.

I AM NOT AGAINST L.A. BUILDING LANDFILLS. I AM NOT AGAINST US BUILDING A RAILROAD TO DO THAT. I AM AGAINST INADEQUATE SCIENTIFIC STUDIES DONE TO OBVIATE PROBLEMS THAT COULD RESULT IN THE FUTURE. WE HAVE -- YOU KNOW -- WHAT HAS BEEN DONE? IS IT NECESSARY TO DO A 100-YEAR STUDY? I THINK SO WHEN WE ARE TALKING ABOUT POLLUTING A FUTURE MAJOR SOURCE OF WATER IN THE HIGH DESERT. WE HAVE SHORTAGES OF WATER NOW. WE ARE STRUGGLING FOR WATER NOW. AND WE NEED TO PAY ATTENTION TO THAT.

MR. READ: MR. CURRY, CAN YOU WRAP IT UP?

MR. CURRY: WELL, AGAIN, I WOULD JUST LIKE TO SAY THAT THERE'S A LOT MORE WORK THAT

NEEDS TO BE DONE BEFORE WE CAN SAY YES TO THIS THING.

MR. READ: THANK YOU. THAT'S THE LAST OF THE FOLKS WHO HAD GIVEN ME A REGISTRATION CARD. WE DO HAVE ABOUT FIVE MINUTES LEFT. IS THERE ANYONE WHO WOULD LIKE TO MAKE A COMMENT? YES, SIR?

MR. BURK: I WOULD LIKE TO ASK A QUESTION. WHEN IS THE NEXT MEETING SCHEDULED, AND WHEN IS THE --

MR. READ: WEDNESDAY.

MR. BURK: WEDNESDAY? AND WHEN IS THE FINAL RESOLUTION GOING TO BE EFFECTED? AND IS THAT GOING TO BE PUBLIC, OR IS THAT GOING TO BE A CLOSED MEETING?

MR. ROMOLI: THIS IS A DRAFT EIS/EIR. THE COMMENTS HERE WILL BE RESPONDED TO AND PUT OUT IN A FINAL EIS/EIR, WHICH WILL BE MAILED OUT TO PEOPLE. THIRTY DAYS AFTER THAT EIS/EIR HAS BEEN MAILED OUT, WE CAN MAKE A DECISION, WHAT'S CALLED A RECORD DECISION. WHETHER OR NOT WE WILL DO THAT, I DON'T KNOW.

THE COUNTY IS A JOINT PARTNER IN THIS, AND THEY HAVE THEIR PROCESS THROUGH THE PLANNING COMMISSION TO GO THROUGH, TOO, AND THE BOARD OF

2.6-106

SUPERVISORS.

MR. BURK: WHO IS "WE"?

MR. ROMOLI: BUREAU OF LAND MANAGEMENT, CALIFORNIA DESERT DISTRICT.

MR. BURK: OKAY. DO WE AS CITIZENRY HAVE ANY IMPACT ON THAT?

MR. ROMOLI: YOU ARE HAVING AN IMPACT TONIGHT.

MR. BURK: I KNOW. I KNOW. BUT WHETHER THIS GOES INTO THE CIRCULAR FILE AFTERWARDS OR NOT --

MR. ROMOLI: OH, NO. THAT'S WHY WE HAVE A COURT REPORTER HERE.

MR. READ: AS WE SAID, EACH OF THE COMMENTS MADE TONIGHT AND ANY RECEIVED WILL BE PUBLISHED IN THE DOCUMENT SO THAT YOU WILL KNOW THAT IT IS -- IT HAS BEEN TAKEN.

MR. BURK: AS YOU CAN THINK, I HAVE A VERY HEALTHY DISRESPECT FOR --

MR. READ: SKEPTICISM?

MR. BURK: SKEPTICISM IS A VERY MILD WORD -- FOR THE ABILITY OF GOVERNMENT TO FOLLOW THROUGH ON WHAT IT SAYS IT WILL DO.

MR. READ: ANYONE WHO HASN'T SPOKEN, WOULD YOU HAVE ANY COMMENT? YES, SIR?

MR. SCOTT: I AM RANDY SCOTT WITH SAN BERNARDINO COUNTY PLANNING DEPARTMENT. LET ME JUST MAKE A COUPLE OF COMMENTS ABOUT THE PLANNING PROCESS IN REVIEWING AND CONSIDERING THE PROJECT.

AS DOUG POINTED OUT, IT'S A JOINT REVIEW, BECAUSE B.L.M. HAS TO TAKE SOME ACTIONS AND THE COUNTY HAS TO TAKE THE PRIMARY ACTION IN APPROVING THE SITING OF THE FACILITY AND A GENERAL PLAN AMENDMENT TO DESIGNATE IT AS LANDFILL IN THE COUNTY SYSTEM.

THE EIR PORTION IS BEING PREPARED TO MEET CEQA REQUIREMENTS, CALIFORNIA ENVIRONMENTAL QUALITY ACT, WHICH WAS MENTIONED EARLIER, AND THAT WILL BE CONSIDERED THROUGH A COUPLE OF HEARING PROCESSES. THE PLANNING COMMISSION OF THE COUNTY WILL CONSIDER THE PROJECT AND THE ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES AND SO ON, THE MERITS OF THE PROJECT IN TOTAL, AND THEN MAKE RECOMMENDATIONS TO CHANGES IN EITHER THE DESIGN OR THE ENVIRONMENTAL ASPECTS OF THE PROJECT.

THEY WILL THEN FORWARD THEIR RECOMMENDATIONS ON TO THE BOARD OF SUPERVISORS WHO WILL ULTIMATELY ACT ON THAT. THE PRECISE HEARING DATES HAVEN'T BEEN ESTABLISHED YET, BECAUSE WE HAVE TO GO THROUGH RESPONSE TO THIS -- TO THE

COMMENTS THAT ARE RECEIVED ON THE ENVIRONMENTAL EFFECTS. AND AS DOUG INDICATES, THERE WILL BE A FINAL EIR/EIS PREPARED AND DISTRIBUTED TO THOSE INDIVIDUALS THAT RECEIVED THE DOCUMENT ORIGINALLY, PLUS THOSE REQUESTING OR PROVIDING COMMENTS THROUGH THIS PROCESS.

THAT WILL ALLOW PEOPLE TO SEE HOW THE RESOLUTION OF ALL THE ENVIRONMENTAL ISSUES ARE DETERMINED AND WHAT THE DISPLAY OF THOSE ARE THROUGH AN INDEPENDENT CONSULTANT THAT HAS PREPARED ALL OF THIS. AND THAT FINAL WILL BE CONSIDERED ALONG WITH THE DRAFT BY THE PLANNING COMMISSION AND BY THE BOARD, ALONG WITH THE DESIGN ASPECTS OF THE ENTIRE PROJECT.

THERE WILL BE HEARING NOTICES THAT WILL BE SENT OUT TO EVERYONE THAT HAS RECEIVED COPIES OF THE DOCUMENT, ADJOINING PROPERTY OWNERS, AND COMMENTERS IN THIS PROCESS.

SO THAT'S KIND OF A THUMBNAIL SKETCH OF HOW THE COUNTY WILL ACT AND CONSIDER THE PROPOSAL.

AUDIENCE MEMBER: HOW ABOUT THE STATE?

MR. SCOTT: THE STATE WILL ACT IN A CAPACITY REFERRED TO AS A RESPONSIBLE AGENCY ROLE,

AND THERE'S VARIOUS STATE AGENCIES THAT WILL HAVE FOLLOW-ON PERMITTING LIKE THE WATER QUALITY CONTROL BOARD, THE INTEGRATED WASTE MANAGEMENT BOARD, AND ISSUING SORT OF MORE NARROWER-FOCUS PERMITTING. AND SO THEY ARE LOOKING AT INTEGRATED WASTE MANAGEMENT BOARD IN CONJUNCTION WITH THE LOCAL ENFORCEMENT AGENCY WILL ISSUE A FACILITY PERMIT LAND -- SOLID WASTE FACILITY PERMIT, ET CETERA.

UNIDENTIFIED SPEAKER: THE WATER QUALITY --

MR. READ: WE ARE GETTING A LITTLE OUT OF CONTROL. THE RECORDER IS HAVING A DIFFICULT TIME KEEPING TRACK OF ALL THE QUESTIONS. IT REALLY SEEMS AS THOUGH THE HEARING IS OVER. IF THERE'S QUESTIONS FOR MR. SCOTT, MR. ROMOLI, PLEASE DO THOSE AFTER THE HEARING. SO WITH THAT, THANK YOU A LOT FOR COMING, AND I DECLARE THE MEETING OVER.

(THE PROCEEDINGS WERE ADJOURNED AT 9:10 P.M.)

-OOO-

2.6-108

REPORTER'S CERTIFICATE

STATE OF CALIFORNIA)
) SS.
COUNTY OF RIVERSIDE)

I, DIANE L. MARTIN, A CERTIFIED SHORTHAND REPORTER, DO HEREBY CERTIFY THAT THE FOREGOING 94 PAGES COMPRISE A FULL, TRUE, AND CORRECT TRANSCRIPTION OF THE PROCEEDINGS HAD AND THE TESTIMONY TAKEN AT THE HEARING IN THE HEREINBEFORE-ENTITLED MATTER.

DATED THIS 19TH DAY OF FEBRUARY, 1993, AT RIVERSIDE, CALIFORNIA.

Diane Martin

DIANE L. MARTIN, C.S.R., R.P.R., C.M.
C.S.R. NO. 8268

DOCUMENT 093
BLM PUBLIC HEARING TRANSCRIPT
BARSTOW, CALIFORNIA - FEBRUARY 8, 1993
RESPONSE TO COMMENTS

Response 093-1

1. An April 1993 report by Edwin Barnes, Ph.D., entitled *Agricultural Impact Report - The Potential Impact on Local Agriculture from the Proposed Rail•Cycle Bolo Station Landfill*, summarizes experiences reported by researchers at Cal Poly (Barnes, 1993), regarding the following agricultural operations conducted in close proximity to sanitary landfills:
   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile from the 2,800 ton per day County of Los Angeles Spadra Landfill.
   - Privately owned and operated orchards situated in close proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

2. The following discussion highlights the findings of the above report:
   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported insect impacts.
   - Negative effects, attributable to landfill operations or insects attracted to the area by the landfill on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

3. The following mitigation measure is recommended in the report to minimize potential agricultural impacts from insects potential transported to the site:
   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

Response 093-2

1. As discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS, the primary methods to control birds (including ravens) at the proposed landfill are based on standard landfill operations. These include compaction of waste at the working face, periodic application of cover material during the day, maintaining a small working face, and an active litter control program. These methods are expected to be effective in limiting the attractiveness of the site to ravens and other birds.

2. In the event ravens or other bird species are attracted to the site, various measures would be implemented on an as-needed basis to prevent bird populations from becoming established at the landfill. Section 5.6.5 of the Draft EIR/EIS included specific mitigation measures that would be implemented if ravens or other birds are found to be attracted to the site.

3. If it becomes necessary to use noise generating devices, such as propane cannons and racket bombs, to startle birds at the proposed landfill, their use would be restricted to daylight hours, as birds are not active at night. While noise generating devices have the potential of creating a noise nuisance issue at landfills in close proximity to residential areas, the closest residential areas to the proposed landfill are located at a distance of approximately five to six miles from the proposed site. In the event noise generating devices are determined to be necessary to control birds at the proposed landfill, their use would not adversely affect residential areas in the general area.

Response 093-3

1. It is noted, that measures which would be enacted to discourage ravens would also be effective in discouraging other bird populations.

Response 093-4

1. The situation described in this comment would not be allowed to occur at the proposed landfill. CCR; Title 14 provides the SBCDEHS, acting as the LEA, with broad authority through its issuance of a SWFP to control the operations of landfills to assure that they do not create nuisance or health related issues. As the LEA, the SBCDEHS would conduct periodic inspections of the proposed landfill to assure that the conditions

of the SWFP are being met, including the control of birds and offsite litter. The LEA is also responsible for the investigation of complaints from surrounding areas that may arise regarding the operations of the proposed landfill.

2. As discussed in Response 093-2, the primary methods to control birds (including ravens) at the proposed landfill are based on standard landfill operations.

Response 093-5

1. After loading at the MRF, and during transit to Bolo Station, fresh air would not be allowed to flow through the containers. The containers would be equipped with a vent hatch which would be closed at all times, except at the landfill working face, where it would be opened to allow air to enter the container to assist in tipping of solid waste from the container.

2. Some components of solid waste would begin to decompose prior to collection, and would continue to decompose during transit from the MRF to the landfill. During this early period, decomposition would proceed mostly by aerobic processes that produce carbon dioxide and water vapor, rather than by anaerobic processes that produce carbon dioxide, methane, and odorous VOCs.

3. Substantial dilution of emitted gases (several orders of magnitude) would occur as a result of the amount of air displaced by the train while it is in motion, and as the train wake air disperses off the railroad right-of-way. Therefore, odors emitted from containers during normal transit and unexpected delays are not expected to be detectable.

Response 093-6

1. The solid waste bound for the landfill would be transported in enclosed steel containers and would be cleaned at Bolo Station. Doors on the containers are equipped with a seal to prevent blowing trash, odors, and significant drips from liquids that may be in the waste. These measures would control vectors, litter, and odor during transport.

2. Accidents and track defects, should they occur, are reported to the ATSF dispatcher in San Bernardino. The train dispatcher maintains a list of supervisors, repair crews, and equipment available on a 7-day, 24-hour basis for responding to such calls. As appropriate, responses are coordinated with local agencies.

3. Based on the above procedures, significant impacts or problems are not expected. For additional detail on rail operations, see Section 5.8.1.2 of the Draft EIR/EIS.

Response 093-7

1. As discussed in Section 3.2.2 of the Draft EIR/EIS, while the Rail•Cycle waste-by-rail system would receive solid waste that has been processed through MRFs, the MRFs are not part of the proposed action for the Bolo Station Landfill. Site specific permitting and approval, including CEQA compliance, would be conducted for each MRF.

2. The issues raised by this comment are associated with operation of the City of Commerce MRF and are not related to the proposed action addressed in the Draft EIR/EIS for the proposed landfill.

Response 093-8

1. See Response 093-7.

Response 093-9

1. As discussed in Chapter 2.0 of the Supplement, even with compliance with AB 939 source reduction and recycling requirements, Los Angeles County will still require substantial additional landfill capacity. For more information on solid waste management practices in Los Angeles County, see Chapter 2.0 of the Supplement.

Response 093-10

1. This comment expresses concern regarding cumulative impacts associated with trains hauling solid waste from MRFs to the proposed Bolo Station Landfill on the same rail lines used by other regional passenger and freight trains. In response to this and other comments, various aspects of the analyses performed for the Draft EIR/EIS have been refined and clarified. These analyses were documented in Chapters 4.0 and 5.0 of the Supplement.

Response 093-11

1. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and

alternative waste management practices, such as increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to southern California communities after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, which was developed in response to a request by the Los Angeles County Sanitation Districts for long-term landfill capacity, would meet that need by helping to satisfy state requirements, mandated by AB 939, for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise be feasibly reduced at the source, recycled or composted.

2. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this issue, see Section 3.3 of the Supplement.

Response 093-12

1. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. As discussed in Chapter 2.0 of the Supplement, a commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

Response 093-13

1. As discussed in Chapter 2.0 of the Draft EIR/EIS, even with compliance with AB 939 source reduction and recycling requirements, cities and counties in southern California will still require substantial additional landfill capacity. For more information on state-mandated solid waste management practices in Los Angeles County, see Chapter 2.0 of the Supplement.

Response 093-14

1. See Response 093-13.

Response 093-15

1. See Response 093-13.

Response 093-16

1. Current state and federal regulations (i.e., CCR, Titles 14 and 23, and Subtitle D) require operators of landfills to include a financial assurance mechanism to cover the cost for closure and postclosure of the landfill, and for potential corrective actions should the landfill contaminate ground water. The financial assurance mechanism must be acceptable to the CIWMB and the RWQCB. The regulations include the financial assurance requirements to prevent the type of situations suggested by this comment.

Response 093-17

1. The effects of proposed legislation, such as the recently introduced AB 223, may be of concern to the citizens of the state. However, as this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required.

Response 093-18

1. The suggestion made by this comment that the improvement of State Highway 62 is related to the proposed action is not correct. The proposed action is based on the rail-haul of waste to the proposed landfill and does not include provisions for hauling of waste to the proposed site by truck. As such, the proposed action does not require improvements of roadways in the area.

Response 093-19

1. Based on an exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However, the authors clearly make a distinction between liners and liner systems. Further, they state that, based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that "Since no liner is impermeable, leakage

control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions."

2. As detailed in Chapter 3.0 of the Supplement, the proposed action includes a double liner composite system and UZM system to provide 100 percent monitoring coverage under the liner. This monitoring system would provide sufficient time to implement corrective action in the event of a release. The measures included in the EIR/EIS are considered sufficient to mitigate potential ground water quality impacts from the proposed action.

Response 093-20

1. As discussed in Section 4.9 of the Draft EIR/EIS, the portion of Route 66 (National Trails Highway) in the vicinity of the proposed landfill is not designated as a scenic highway by the County or the state. The closest portion of Route 66 that has been designated as scenic is the section of the highway between Ore Grande and Lenwood, approximately 85 miles north-northwest of the proposed site. In addition, there are no designated scenic areas in the area surrounding the proposed Bolo Station site. The closest designated scenic area to the proposed site is the portion of I-40 between Ludlow and Needles that at its closest is 12 miles north of the proposed site. The proposed action would not result in the lose of scenic designation in the area.

2. With the exception of a potential limited increase in population as a result of a portion of the employees of the proposed landfill choosing to reside in the Morongo Basin (see Section 5.15 of the Draft EIR/EIS), the proposed action would not result in impacts to the Morongo Basin that would cause the basin to lose any scenic designations it may have.

Response 093-21

1. See Response 093-11.

Response 093-22

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 093-23

1. While Newberry Springs is not specifically mentioned in the Draft EIR/EIS, there are various other large and small communities that are also not specifically mentioned and for which the proposed action could have impact similar as those to Newberry Springs, (i.e., rail traffic and socioeconomic). This is not to say that the impacts to Newberry Springs and these other communities have been ignored. For example, the potential increase in vehicle waiting times at Newberry Springs Road and Mountain View Road, both in Newberry Springs, were addressed in Sections 4.12 and 5.12 of the Draft EIR/EIS.

2. Regarding the statement that Newberry Springs was not on the mailing list for the Draft EIR/EIS, Chapter 11.0 of the Draft EIR/EIS provided the distribution list for the Draft EIR/EIS. Included on this list are the Newberry Springs Community Services District and the Newberry Springs Property Owners Association.

Response 093-24

1. During the initial phase of landfill operations, two Rail•Cycle trains per day would pass through Newberry Springs. This would be in addition to the 37 other trains that utilize the track on a daily basis. The Rail•Cycle trains would be a maximum of 4,000 feet long. As the distance between the two Newberry Springs railroad crossings (Newberry Springs Road and Mountain View Road) is about 5,800 feet, it would not be possible for a passing Rail•Cycle train to block both crossings at the same time.

2. In the unlikely event of a fire in a waste container of a landfill-bound train, it is the position of the County Forestry and Fire Warden Department that it would be more advantageous to offload the materials at the landfill than to attempt to respond to the incident en route (Miller, 1993). The landfill would have onsite emergency personnel and an adequate water supply. In addition, a new County fire station would be constructed by Rail•Cycle near the entrance of the proposed landfill. Appropriate firefighting equipment and County firefighting personnel would be provided at this new fire station.

3. Regarding the ability of Newberry Springs firefighting personnel to suppress a fire on a landfill-bound train, the length of hoses carried by the Newberry Springs Fire Department is not considered an issue.

Response 093-25

1. Regarding the suggestion made by this comment concerning the Fort Cady Road crossing, ATSF indicates that this is a private road that terminates in each direction at the ATSF tracks (Brendza, 1993). The commenter's use of "upgrade" in terms of Fort Cady Road is not appropriate as it implies that a rail crossing is in place at this location. For vehicles to cross the ATSF's tracks at Fort Cady Road would require the construction of a private rail crossing. Construction of a private crossing at Fort Cady Road would require the approval of the PUC.

2. Regardless of the existing status of Fort Cady Road, train-induced delays at the two crossings in Newberry Springs (Newberry Road and Mountain View Road) were addressed in Sections 4.12 and 5.12 of the Draft EIR/EIS. Appendix 1 of the Draft EIR/EIS included specific data regarding these roads and rail crossings.

Response 093-26

1. The potential for either surface or subsurface fire was addressed in Sections 5.8.1.1.1 and 5.8.1.1.2 of the Draft EIR/EIS. Based on operational procedures and facilities, it is concluded that the potential for the occurrence and spread of surface fire is low.

Response 093-27

1. No hazardous fire area exists in the vicinity of Newberry Springs and the County Forestry and Fire Warden Department does not believe that a requirement for a water tank car as part of each Rail•Cycle train is necessary or appropriate (Miller, 1993). In the unlikely event a fire were to occur in a waste container during transport by rail, it is the position of the County Forestry and Fire Warden Department that it would be more advantageous to offload the materials at the landfill, which would have onsite emergency personnel and an adequate water supply (Miller, 1993).

Response 093-28

1. The request for Rail•Cycle to provide the Newberry Springs Fire Department with an all-wheel drive, 2,000-gallon fire truck is not justified. First, the Uniform Fire Code provides criteria for access roads for buildings or facilities, but does not include standards for access roads along railroad tracks. In addition, approximately 66 percent of the rail line between Mineola Road and Ludlow is protected by the County Forestry and Fire Warden Department and is not the responsibility of the Newberry Springs Fire Department (Miller, 1993).

Response 093-29

1. As noted in Response 093-24, Rail•Cycle would construct a new County fire station near the landfill.

2. According to the County Forestry and Fire Warden Department, the Newberry Springs Fire Department has no legal requirement to provide services outside its Community Services District, except for its mutual aid agreements (Miller, 1993).

Response 093-30

1. According to the County Forestry and Fire Warden Department, the Newberry Springs Fire Department has no legal requirement to provide services outside its Community Services District, except for its mutual aid agreements (Miller, 1993). As fire protection for the proposed landfill would be provided by the County, the request made by this comment for Rail•Cycle to purchase firefighting equipment for the Newberry Springs Fire Department is not justified.

Response 093-31

1. See Response 093-12.

Response 093-32

1. The criteria and evidence for selection of project alternatives are clarified in Section 3.3 of the Supplement. Potential alternative sites were identified based on specific siting, design, and operational criteria for a rail-haul landfill. These criteria were applied to the region to screen out unsuitable sites. Sites that met basic siting and operational criteria then underwent a second-tier review, which evaluated site-specific environmental concerns. Based on this evaluation, specific alternative sites were selected to be evaluated in detail in the Draft EIR/EIS. For detailed information on the alternatives selection process, see Section 3.3 of the Supplement.

Response 093-33

1. This comment refers to the various significant unavoidable impacts identified in the Draft EIR/EIS. This comment specifically references an unavoidable adverse impact to ground water quality. As discussed in Section 1.5 of the Draft EIR/EIS, unavoidable adverse impacts from the proposed action are expected to occur in the following topical areas:

   - Ground water supply (i.e., quantity) from the Bristol Basin being in overdraft.
   - Air quality.
   - Visual quality.
   - Socioeconomic in regards to increase population and resulting consumption of land and water resources.

   While ground water quantity is included as a significant unavoidable impact, the impacts to ground water quality are considered by the EIR/EIS to be mitigation to below a level of significance (see Section 5.4.5 of the Draft EIR/EIS).

Response 093-34

1. As discussed in Section 3.3.1 of the Draft EIR/EIS, the maximum number of Rail•Cycle trains is 14 (seven east bound transporting waste to the landfill and seven west bound transporting empty containers back to the MRFs) on a 6-day-per-week basis. The impacts to air quality from rail operations were included in Section 5.7 of the Draft EIR/EIS and Section 5.4 of the Supplement. As acknowledged, the proposed action would result in unavoidable adverse impacts to air quality.

Response 093-35

1. Subsequent to circulation of the Draft EIR/EIS, additional analysis regarding potential air quality impacts was completed for the proposed action. Sections 4.4 and 5.4 of the Supplement described refinement and reevaluation of the impacts and mitigation. The Supplement also included information regarding rail electrification (Section 5.4.3.2). Although this analysis concluded that rail electrification solely to mitigate Rail•Cycle's air quality impacts was not economically feasible, regionwide efforts are underway to implement measures to significantly reduce locomotive emissions.

2. A recent study was conducted under contract to CARB to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:

   - Retarding injection timing and other engine modifications.
   - Selective catalytic reduction (SCR).
   - Use of liquefied natural gas (LNG) fuel with low emission dual fuel or spark ignition (SI) natural gas engines.
   - LNG combined with SCR.
   - Electrification.

   Based on the proposed regulatory framework, allowable locomotive emissions per net ton mile transported would be reduced by 80 percent between 1996 and 2003. Santa Fe Railroad is actively participating in the efforts to develop strategies to reduce locomotive emissions.

Response 093-36

1. Section 5.14.1.2 of the Draft EIR/EIS incorrectly indicated that the proposed project would require reclassification of the land use designation of the proposed site from Resource Conservation to a land use that would allow more intensive use of the site. If the County Board of Supervisors approves the proposed project, the County General Plan would be amended to revise the Infrastructure/ Improvement Level Map and accompanying text

to designate the site as the Bolo Station Landfill. The land use designation of Resource Conservation would be applied to the former public (i.e., BLM) land sections. The remaining sections of land at the proposed site are currently designated as Resource Conservation and would remain as such if the proposed action is approved.

2. The proposed General Plan amendment is the mechanism for revising the Infrastructure/ Improvement Level Map and text to designate the site as a landfill. The General Plan Amendment would be considered by the County Board of Supervisors during its consideration of the proposed project.

3. The County Development Code allows landfills in various land use designations, including a Resource Conservation District, under the provisions that allow other land uses based on meeting locational criteria. The use of the proposed site as a landfill appears to meet these locational criteria; however, ultimately the County Board of Supervisors would consider this issue as part of its decision on the proposed amendment of the County General Plan that would be required for the proposed project to be permitted at the Bolo Station site. The consideration of the proposed project by the County Board of Supervisors would consider the regional perspective of the project as it relates to land use and consistency with the policies of the County General Plan.

Response 093-37

1. The Draft EIR/EIS acknowledged that an increase in ravens could result in additional impacts on the desert tortoise, as ravens are known to prey on tortoise. See Response 093-2 regarding measures to discourage ravens.

2. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

Response 093-38

1. See Response 093-22.

Response 093-39

1. Financial assurance mechanisms are on essential part of securing state and federal permit approvals for the SWFP.

2. CCR, Title 23, Chapter 15, Article 5 requires the owner/operator of a waste disposal facility to establish financial assurance for a "reasonably foreseeable release" of liquid or gas from the "waste management unit." The financial requirement must be complied with by both public and private operators. The acceptable financial instruments are:

   - U.S. Treasury bills
   - Irrevocable letters of credit
   - Bonds
   - Other stable instruments in which the RWQCB is named as sole recipient.

   CCR, Titles 14 and 23 also require the financial assurance of the owner/operator to complete the closure/postclosure operations of the waste management unit.

3. Rail•Cycle has the financial capability to provide the required assurances. No public liability would be assumed for any unlikely noncompliance activities. Rail•Cycle would provide at the time of issuance of the respective permits for construction and operation the necessary assurances for "Reasonable Foreseeable Releases" and "Closure/Postclosure."

4. With these financial mechanisms in place, County taxpayers would not be required to subsidize landfill operations or closure/postclosure activities.

Response 093-40

1. Contamination of the brines utilized by Cargill is not anticipated. See Response 093-19 regarding the proposed liner.

Response 093-41

1. As this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required.

2. See Responses 093-39 and 093-40.

Response 093-42

1. As this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required.

Response 093-43

1. Based on additional analysis in the Supplement (Section 5.3), settlement related to the landfill would have a negligible impact in ground water flow in the underlying aquifer. Therefore, no impact to Cargill's brines are expected.

Response 093-44

1. See Response 093-43.

Response 093-45

1. See Response 093-32.

Response 093-46

1. See Response 093-43.

Response 093-47

1. The geophysical survey and trenching analysis requested by the RWQCB was completed to verify the presence or absence of active and potentially active faults at the proposed site (Jacobs, 1993a). This analysis confirmed the previous findings and conclusions that there are no Holocene faults at or trending towards the proposed site. For a complete discussion of the results of this verification analysis, see Chapters 4.0 and 5.0 of the Supplement.

Response 093-48

1. See Response 093-19.

Response 093-49

1. Subsequent analysis was completed for the proposed action and included in the Supplement.

Response 093-50

1. See Response 093-43.

Response 093-51

1. See Response 093-49.

Response 093-52

1. See Response 093-32.

Response 093-53

1. The discussion of alternatives has been clarified in Section 3.3 of the Supplement. The criteria have been revised to state that the land must be owned by ATSF or the land must have the potential to be acquired by ATSF. For more information about how this criterion was applied to potential alternative sites, see Section 3.3 of the Supplement.

Response 093-54

1. See Response 093-32.

Response 093-55

1. See Response 093-19.

Response 093-56

1. The analysis presented in the Draft EIR/EIS is based on data obtained from a variety of recognized and respected sources. Section 4.4.2.1 presented a discussion of regional ground water based on information provided by numerous sources, which are included as references to the EIR/EIS including the California Department of Water Resources, the U.S. Geological Survey, Jacobs, Southern California Edison, and U.S. Soil Conservation Service.

Response 093-57

1. See Response 093-47.

Response 093-58

1. The proposed landfill would be continually monitored during the operational life of the proposed action. When capacity of the proposed landfill is achieved in 60 to 100 years, the postclosure monitoring and maintenance period would begin. In accordance with CCR, Title 14 and Subtitle D, landfills shall be monitored by the operator/owner for a minimum of 30 years after the landfill ceases accepting waste. At the end of the minimum 30 year postclosure monitoring and maintenance period the LEA and CIWMB must specifically grant approval for termination of postclosure monitoring and maintenance. If the LEA and CIWMB determine that postclosure monitoring and maintenance must continue beyond the minimum 30 year period, the owner/operator would be require to continue postclosure monitoring and maintenance.

2. Based on the above, from a practical point of view, the proposed landfill would be monitored for a minimum of 90 to 130 years (i.e., operational

life of the landfill ranging from 60 to 100 years plus the minimum 30 years of postclosure monitoring and maintenance).

Response 093-59

1. The Draft EIR/EIS contains extensive information as to the endangered status of the desert tortoise, occurrence of the species relative to the locations of the proposed and alternative sites, projected impacts from implementation of the proposed and alternative projects, and associated issues such as the potential occurrence of ravens.

2. See Response 093-37.

Response 093-60

1. The proposed action is a Class III landfill, which would only accept municipal solid waste. Hazardous wastes would not be allowed pursuant to state regulations for Class III landfills.

2. Section 15 and the western one-half of 22 of the proposed site are Class L and Section 8 is Class M. As described in the Draft EIR/EIS (Sections 3.2 and 5.14), for the proposed landfill to occur, these lands would be exchanged for privately held lands near Cadiz Dunes, in Piute Valley, and Fenner Valley, which are surrounded by Class L and M lands. Once the land exchange occurred, Sections 8, 15, and the western one-half of Section 22 would be in private ownership and the Class L and M land use designations would no longer be applicable. There would not be a land use conflict in developing a landfill on these lands. In exchange, the public would receive the benefit of acquiring additional acreage of greater wildlife habitat value and consolidating ownership of public lands.

Response 093-61

1. The basis for the commenter's assertion that the Bolo Station landfill will "end up being a hazardous waste dump" is not clear. Section 3.2.2 of the Draft EIR/EIS provided a detailed description of how municipal solid waste would be processed prior to acceptance for transport to the Bolo Station landfill. For the small quantities of household hazardous waste that may inadvertently enter the municipal waste stream, there will be a waste inspection program of waste delivered to the landfill, plus a hazardous waste temporary storage area where waste can be safely contained prior to removal from the site for proper disposal.

2. See Response 093-60 for a discussion of land use policies.

Response 093-62

1. As described in Section 3.2 of the Draft EIR/EIS, the proposed land exchange would result in the exchange of two and one-half sections of public land for three sections of private land. The BLM has determined that the proposed exchange of lands have greater wildlife value, particularly for desert tortoise, than the public lands at the Bolo Station site. The land exchange would enable BLM to acquire quality public lands and, at the same time, consolidate its holding of public lands, at no cost to the public.

Response 093-63

1. AB 939 requires cities and counties to divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

Response 093-64

1. The commenters opinion is noted.

Response 093-65

1. See Response 093-22.

Response 093-66

1. See Response 093-39 for a discussion of financial assurance mechanisms.

Response 093-67

1. See Responses 093-24 and 093-25.

Response 093-68

1. As noted in Response 093-24, a new County fire station would be constructed by Rail•Cycle near the proposed landfill to respond to potential needs both at the landfill and in the surrounding community.

Response 093-69

1. As noted in Response 093-24, a new County fire station would be built near the proposed landfill to respond to potential needs at the landfill and the surrounding community. As discussed in Section 4.15.4.1.2 of the Draft EIR/EIS, the landfill area is served by the California Highway Patrol air ambulance, with a 5- to 10-minute

response time and subsequent 20- to 25-minute travel time to Palm Springs Desert Hospital which has the nearest trauma center to the project area. Helicopter service is also available for trauma centers at Loma Linda University Hospital and San Bernardino County Medical Center.

Response 093-70

1. The BLM has a standard list of approximately 600 agencies, elected officials, groups, individuals, and electronic and print news media that are notified regarding the availability of documents, such as the Draft EIR/EIS for Rail•Cycle, and regarding public meetings, such as the three public hearings held on the Draft EIR/EIS. In addition, the County provided the Notice of Availability of the Draft EIR/EIS to various newspapers in the region including the following:
   - Desert Dispatch
   - Desert Sun
   - Desert Trail
   - Hi-Desert Star
   - Inland Valley Daily Bulletin
   - Los Angeles Times
   - The Sun
   - Riverside Press-Enterprise
   - Victorville Daily Press

2. The Notice of Availability, which was also included in the Draft EIR/EIS, stated the place, date and time for the three BLM public hearings.

3. The distribution process for the Draft EIR/EIS and the announcement process for the public hearings met the requirements of CEQA and NEPA. While a reasonable effort was made by the County and BLM to notify the public about the availability of the Draft EIR/EIS and the public meetings, it is not possible to assure that each interested individual is notified.

Response 093-71

1. As this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required.

Response 093-72

1. See Response 093-22.

Response 093-73

1. The EIR/EIS for the proposed Bolo Station Landfill is the first set in the process being conducted by the County and BLM to determine whether to approve or deny the proposed action. No decisions have been made by the County Planning Commission, County Board of Supervisors, or the BLM regarding the proposed action.

2. The information in the EIR/EIS will be evaluated be the County Planning Commission during public hearings that will be conducted once the EIR/EIS is complete. The Planning Commission will then make a formal recommendation to the Board of Supervisors regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

3. The County Board of Supervisors will consider the information in the EIR/EIS and the recommendation by the Planning Commission during public hearings regarding the proposed landfill. The County Board of Supervisors will then vote regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

4. The public is encouraged to make its concerns known regarding the proposed landfill to the County Planning Commission and County Board of Supervisors.

Response 093-74

1. One of the purposes of an EIR/EIS is to identify significant unavoidable impacts that cannot be mitigated below a level of significance. As an information document, it is not the purpose of an EIR/EIS to render an opinion as to whether the benefits of the proposed action outweigh the unavoidable adverse impacts. The evaluation of the potential impacts and benefits of a proposed action is the responsibility of the decision makers for the project. In the case of the proposed Bolo Station Landfill, the decision makers are the County Board of Supervisors and BLM.

Response 093-75

1. Rail•Cycle has made an effort to inform CLC of the details of the proposed action. According to Rail•Cycle, several contacts have been made with CLC over the past three years. This contact includes telephone calls to CLC headquarters in an attempt to set a meeting between the directors of Rail•Cycle and CLC. The following information about contact between Rail•Cycle and CLC recorded in memoranda in the files of Garth R. Morgan, Ph.D., Senior Special Projects Engineer for Rail•Cycle:
   - On May 23, 1991, Mr. Louis E. Gonzalez, Vice President of CLC, and Ed Flenniken

and Garth Morgan, both of Rail•Cycle, met to discuss the proposed Bolo Station Landfill project, beginning with permitting to construct and operate. The liner system and its safeguards were discussed. Mr. Gonzalez stated he was satisfied that the area's ground water would be protected. At that time, Rail•Cycle was considering composting activities at the facility. Mr. Gonzalez expressed interest in obtaining compost for development of CLC soils to improve production. Mr. Gonzalez also stated that the long-range plans for CLC properties is to develop a resort community. Dr. Morgan offered to supply CLC with a set of Phase I, Site Characterization reports and a set of the Conceptual Site Development Plans.

- On June 19, 1991 a meeting was held with Mr. Gonzalez and Dr. Morgan, during which Dr. Morgan delivered the Phase I - Site Characterization reports plus a set of Conceptual Site Development Plans. Dr. Morgan expressed an interest in meeting with the then-Vice President of Pacific Agricultural Holdings, Inc., Mr. Tom Morrison, to discuss the project. Efforts to arrange a meeting with Mr. Morrison were made by Rail•Cycle but Mr. Morrison was never available.
- Rail•Cycle continued to attempt to set a meeting with CLC at their Cadiz office and at their Fresno office. Rail•Cycle's telephone calls about a meeting were not returned.
- Mr. Gonzalez reported at a July 1991, meeting with Rail•Cycle that he had reviewed the Conceptual Site Development Plans with Mr. Morrison, and Dr. Morgan again requested a meeting with Mr. Morrison. Mr. Gonzalez replied that setting a meeting during the summer growing session would be difficult and suggested trying to set a meeting in the fall or winter, when the agricultural operations slow.
- On February 20, 1992, Dr. Morgan contacted Mr. Morrison's office in Fresno and was told that Mr. Morrison had resigned and that Mr. George Rice had taken his place. Dr. Morgan spoke with Mr. Rice's secretary and suggested setting a meeting to present the proposed Bolo Station Landfill project to Mr. Rice and others that CLC believed should be informed. Dr. Morgan offered to meet either at the Fresno or Cadiz offices of CLC. No response was received from Mr. Rice. Additional telephone calls made by directors of Rail•Cycle to Mr. Rice have not been returned.

Response 093-76

1. Analysis regarding the potential impacts to CLC was included in Section 5.4 of the Draft EIR/EIS and Sections 4.2 and 5.2 of the Supplement.

Response 093-77

1. The comment expresses the opinion of the commenter. As discussed in Response 093-76, the potential impacts of the proposed action of adjacent agricultural operations (i.e., CLC) were addressed in the Draft EIR/EIS.

Response 093-78

1. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California.

Response 093-79

1. AB 939 requires cities and counties to divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively. Table 3.2 of the Draft EIR/EIS showed the percent of the projected waste stream to the Bolo Station Landfill that will likely be recycled at a MRF. It is anticipated that this diversion rate, along with source reduction, will enable cities and counties to meet their AB 939 requirements.

Response 093-80

1. See Response 093-22.

Response 093-81

1. As described from the results of numerous studies, both the Bristol and Cadiz basins are hydrologically closed, or internally drained basins, in which evaporation is the primary means of ground water discharge rather than subsurface flow into another basin (Jacobs, 1991b). The boundaries of the surrounding mountain ranges and underlying basement complex define the boundaries of the Bristol and Cadiz basin as a result of their relative impermeability

(Jacobs, 1990c, as in Moyle, 1967; and Rosen, 1989).

2. The commenter's assertion that water flows underground from the Sierras to the Colorado River is not supported by recent scientific investigations.

Response 093-82

1. See Response 093-11.

Response 093-83

1. Extensive testing and evaluation of the underlying hydrogeologic characteristics of the site were completed for the Draft EIR/EIS and Supplement. The results of these studies were presented in Section 4.4.2 of the Draft EIR/EIS and Section 4.2 of the Supplement.

2. Spill prevention and waste management which includes a discussion as the potential for a fuel spill were addressed in Section 5.8.1.3 of the Draft EIR/EIS, mitigation measures are presented in Section 5.8.5 of the Draft EIR/EIS and include measures to prevent the occurrence of a diesel fuel spill.

Response 093-84

1. See Response 093-83.

Response 093-85

1. See Responses 093-81 and 093-83.

Response 093-86

1. The commenter has misinterpreted the explanation provided in the text of the Draft EIR/EIS. The perimeter channel would be sized and located to intercept and divert water before it gets to the landfill. Therefore, there is no need to line the channel.

2. As stated in the Draft EIR/EIS, runoff from closed or completed portions of the landfill would be collected in a sedimentation basin and tested prior to release. If necessary, it would be treated prior to release although, as stated, this is not expected because this water would not have contacted operating areas of the landfill.

Response 093-87

1. See Responses 093-83 and 093-86.

Response 093-88

1. Chapter 12.0 of the Draft EIR/EIS included a list of the various technical reports prepared by Rail•Cycle and utilized to address potential impacts of the proposed action. Together, these reports constitute a small library of materials (i.e., over 2,500 pages). As stated on the cover sheet and in Chapter 12.0 of the Draft EIR/EIS, these reports are available for public review at the County Planning Department and the BLM-Needles Resource Area.

2. By making copies of the technical reports available at the County and BLM, these reports are considered to be available for public review (Section 21061 of the Public Resources Code). Information that is available for public review is not required by CEQA to be repeated in its entirety in an EIR (Section 21061 of the Public Resources Code). Including the findings of the various geotechnical reports and other technical reports on other topics in the Draft EIR/EIS, and making these reports available to specific agencies and the public for review meets the intent of CEQA and NEPA. It also balances the need to provide information on impacts of the proposed action in a concise document with the potential cost of reproducing and distributing several thousand pages, which only a limited number of commenters may wish to review.

3. The volume of these materials is so great that it would not have been practical to provide them at the public meetings as individuals would not have had an opportunity to review them during the hearings.

PUBLIC HEARING IN RE:)
)
RAIL CYCLE PROJECT)
______________________________)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

LOCATION: TWENTY-NINE PALMS HIGH SCHOOL
72-750 WILDCAT WAY
MULTI-PURPOSE ROOM
TWENTY-NINE PALMS, CA

DATE AND TIME: WEDNESDAY, FEBRUARY 10, 1993
7:00 TO 7:42 P.M.

REPORTED BY:

DIANE L. MARTIN, C.S.R., R.P.R., C.M.

(NO. 8268)

JOB NO. 21835DLM

PRESENT

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BY: MIKE BLYMYER
101 WEST SPIKE'S ROAD
P.O. BOX 88
NEEDLES, CALIFORNIA 92363
(619) 326-3896

SPEAKERS:

RAY KIRKHAM, PAGE 5
WILLIAM DAVIS, PAGE 9
BETTY CAMPBELL, PAGE 10
FRANK GIESING, PAGE 12
ESTHER HERBERT, PAGE 14
LOUIS GONZALEZ, PAGE 16
ALLEN BARLER, PAGE 20
D. J. MASKER, PAGE 22
DONNA FOX, PAGE 23
MARK SIEGMUND, PAGE 25
KATRINA STEVENS, PAGE 26
RANDY SCOTT, PAGE 27

TWENTY-NINE PALMS, CA FEBRUARY 10, 1993

PROCEEDINGS

-OOO-

MR. BLYMYER: GOOD EVENING. IT'S 7:00 P.M., OR 1900 HOURS, DEPENDING ON HOW YOU KEEP TIME. I'D LIKE TO BRING THIS HEARING TO ORDER, PLEASE.

MY NAME IS MIKE BLYMYER. I AM THE BUREAU REPRESENTATIVE. I WORK IN NEEDLES, CALIFORNIA, AND I AM GOING TO BE ACTING AS A HEARING OFFICER FOR THE CALIFORNIA DESERT DISTRICT TONIGHT.

THERE HAVE BEEN PUBLISHED NOTICES OF THIS HEARING AND OTHER HEARINGS THAT ARE BEING HELD WITH RESPECT TO THE SUBJECT THAT WE ARE GOING TO BE TAKING STATEMENTS ON TONIGHT. AND I WOULD LIKE TO READ INTO THE RECORD THE PURPOSE OF THIS MEETING AND WHAT WE WILL BE DOING HERE TONIGHT. AM I COMING ACROSS OKAY?

A JOINT DRAFT ENVIRONMENTAL IMPACT STATEMENT AND ENVIRONMENTAL IMPACT REPORT HAVE BEEN PREPARED BY THE BUREAU OF LAND MANAGEMENT AND THE COUNTY OF SAN BERNARDINO PLANNING DEPARTMENT FOR A PROPOSED SOLID WASTE LANDFILL NEAR AMBOY. THE PROJECT IS TERMED THE RAIL CYCLE - BOLO

STATION LANDFILL.

THE SOLID WASTE WILL BE SORTED AT MATERIAL RECOVERY FACILITIES LOCATED AT VARIOUS SOUTHERN CALIFORNIA CITIES AND COUNTIES. THE MATERIAL WILL THEN BE PACKED INTO CONTAINERS AND PLACED ON TRAINS. THE PROPOSED SITE IS 4,500 ACRES, OF WHICH 2,100 ACRES WOULD BE USED FOR A LANDFILL. BEST ESTIMATES TO DATE INDICATE THE LANDFILL WOULD BE OPEN 60 TO 100 YEARS. THE FEDERAL ACTION IS THE EXCHANGE OF 20 -- EXCUSE ME -- 2 1/2 SECTIONS AND THE ISSUANCE OF AN ACCESS RIGHT-OF-WAY.

THREE ALTERNATIVES WERE EXAMINED: A SITE AT CADIZ VALLEY; A REDUCED SIZE ALTERNATIVE; AND A NO-ACTION ALTERNATIVE. THE DRAFT EIR/EIS EXAMINES IMPACTS AT THE PROPOSED SITE AND FOR THE ALTERNATIVE. IMPACTS EXAMINED WERE TRANSPORTATION, WILDLIFE, AIR QUALITY, GROUNDWATER, AND VISUAL, AMONG OTHERS. THE PURPOSE OF THIS MEETING IS TO OBTAIN COMMENTS ON THE DRAFT EIS/EIR. ALL COMMENTS WILL BE RECORDED VERBATIM WHILE WE ARE IN SESSION BY THE RECORDER.

THESE COMMENTS AS WELL AS WRITTEN COMMENTS WILL HAVE A WRITTEN RESPONSE IN THE FINAL EIS/EIR. ADDITIONAL HEARINGS WILL ALSO BE HELD AT

THE SAN BERNARDINO COUNTY GOVERNMENT CENTER HEARING CHAMBERS ON FEBRUARY 11TH. THAT MEETING WILL ALSO RUN FROM 7 O'CLOCK TO 9 O'CLOCK, OR 1900 TO 2100 HOURS. WRITTEN COMMENTS BESIDES THOSE SUBMITTED HERE WILL BE ACCEPTED UNTIL MARCH 3RD, 1993. COMMENTS ARE TO BE MAILED TO PLANNING DEPARTMENT, SAN BERNARDINO COUNTY, 385 NORTH ARROWHEAD AVENUE, THIRD FLOOR, SAN BERNARDINO, WITH A ZIP CODE OF 92415, ATTENTION: MR. RANDY SCOTT. ANYBODY THAT NEEDS THAT ADDRESS LATER ON, PLEASE SEE DOUG IN THE BACK OF THE ROOM. HE WILL BE MORE THAN HAPPY TO GIVE IT TO YOU.

I WILL FIRST CALL THOSE PEOPLE WHO HAVE INDICATED THAT THEY WISH TO MAKE A COMMENT. AFTER EVERYBODY THAT HAS FILLED OUT A CARD HAS HAD AN OPPORTUNITY TO MAKE THEIR STATEMENT, I WILL THEN CALL INTERESTED INDIVIDUALS ON A ONE-BY-ONE BASIS SO THAT THEY MAY ALSO MAKE A STATEMENT.

THE FIRST PERSON THAT WE HAVE REGISTERED IS MR. RAY KIRKHAM.

MR. KIRKHAM: MY NAME IS RAY KIRKHAM. I LIVE EAST OF -- I LIVE EAST OF -- I HAVE TROUBLE -- 29 PALMS.

SHEER MISREPRESENTATION OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT CONTROL

MEASURES IN PARAGRAPH 5.7.4 OF THE EIR/EIS CREATE A RHETORICAL SETTING IN WHICH FALSE CONCLUSIONS --

UNIDENTIFIED SPEAKER: YOU HAD BETTER TURN THE MIKE ON.

MR. KIRKHAM: IT'S NOT ON?

UNIDENTIFIED SPEAKER: IT'S ON NOW. THERE'S A LITTLE BUTTON THERE. DON'T SWITCH IT.

MR. KIRKHAM: -- IN WHICH FALSE CONCLUSIONS FAVORING THE PROJECT MAY BE DRAWN. THE QUESTION OF HOW SOUTHERN CALIFORNIA WILL DEAL WITH THE SOLID WASTE SITUATION ABSENT THIS PROJECT IS NOT ADDRESSED.

THE EIR/EIS STATES THAT THIS PROJECT IS CONSISTENT WITH SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S AIR QUALITY MANAGEMENT PLAN WHICH SUPPORTS OUT-OF-BASIN TRANSPORT OF BIODEGRADABLE SOLID WASTE. LET'S SEE WHAT SCAQMD HAS TO SAY ABOUT THIS. IN A LETTER TO "THE SUN" DATED MARCH 27TH, 1992, REGARDING A SIMILAR PROJECT PLANNED BY OTHERS FOR EAGLE MOUNTAIN, JAMES M. LENTZ, THE DISTRICT EXECUTIVE OFFICER SAYS, QUOTES, "AQMD'S AIR QUALITY MANAGEMENT PLAN FOR CLEAN AIR BY 2010 INCLUDES A MEASURE CALLING FOR HAULING TRASH BY LOW-POLLUTING ELECTRIC TRAINS, NOT CONVENTIONAL DIESEL RAIL ENGINES." ①

LATER, IN THE SAME -- LATER, IN THE SAME LETTER, HE SAYS OF MRC ADS TOUTING THE EAGLE MOUNTAIN PROJECT, "THE OMISSION OF THE WORD 'ELECTRIC' RAIL CONSTITUTES A SERIOUS MISREPRESENTATION OF AQMD'S POSITION ON THE ISSUE." ① CONT.

THIS EIR LIKEWISE OMITS THE WORD "ELECTRIC" RAIL FROM ITS TEXT. PROPONENTS OF THIS PROJECT ARE GRASPING FOR STRAWS IN THE MATTER OF JUSTIFYING THIS PROJECT, AND THOSE STRAWS, I'M CERTAIN, WILL BREAK AT SOME TIME DURING THE PERMITTING PROCESS.

I ALSO WANT TO CALL YOUR ATTENTION TO FOOTNOTE 3 IN THE TABLE 5.7.10 IN THE EIR/EIS. IT SAYS, "THE NO-ACTION ALTERNATIVE SHOULD BE BASED ON NINE-TON CAPACITY TRUCKS TRANSPORTING WASTE 100 MILES ONE-WAY TO A HYPOTHETICAL LANDFILL OUTSIDE THE SOUTH COAST AIR BASIN." NOW, I ASK YOU, HOW OFTEN WILL TRASH BE TRANSFERRED TO -- TO VEHICLES SMALLER IN SIZE THAN THE ORIGINAL COLLECTION VEHICLES FOR LONG-RANGE TRANSFERS? I GUESS IT WOULD ONLY BE DONE HYPOTHETICALLY TO GENERATE FAVORABLE COMPARISON FIGURES FOR THE PROJECT. ②

SO FAR, IN-BASIN SOLUTIONS TO SOLID WASTE TREATMENT AND DISPOSAL HAVE BEEN TOTALLY IGNORED THOUGH THIS SOLUTION CLEARLY HOLDS THE GREATEST PROMISE. LET'S SEE WHAT SCAQMD'S AIR QUALITY MANAGEMENT PLAN HAS TO SAY ABOUT THIS. I QUOTE DIRECTLY FROM MEASURE A-D-1, PAGE 6, UNDER THE HEADING "PROPOSED METHOD OF CONTROL." QUOTES, "IF POTENTIAL EMISSIONS REDUCTIONS FROM OUT-OF-BASE" -- LET ME START THAT ONE AGAIN. "IF POTENTIAL EMISSIONS REDUCTIONS FROM OUT-OF-BASIN TRANSPORT OF BIODEGRADABLE SOLID WASTE ARE ESTIMATED TO BE MINOR OR INSIGNIFICANT, ALTERNATIVE CONTROL METHODS UTILIZING THE BEST AVAILABLE TECHNOLOGY AT DISPOSAL SITES WITHIN THE BASIN WILL BE DEVELOPED." ③

SO THERE YOU HAVE IT. SCAQMD WANTS ELECTRIC TRAINS ONLY. THIS PROJECT USES DIESEL. IN ALL OUT-OF-BASIN SOLID WASTE TRANS- -- IN ALL OUT-OF-BASIN SOLID WASTE TRANSPORT SCENARIOS, SCAQMD NOWHERE ADVOCATES ANYTHING BUT TOTAL EXPORTATION OF BOTH THE TRASH AND THE ENERGY GENERATION POLLUTION. IF THEY CAN'T GET ELECTRIC TRAINS, THEY WANT HIGH-TECH TREATMENT AND CONTROL WITHIN THE BASIN.

I PERSONALLY FIND SCAQMD'S POLLUTION EXPORT IDEA UNCONSCIONABLE, REGARDLESS -- THEY WILL NOT SUPPORT THIS PROJECT.

2.6-125

I CAN ONLY WISH THAT ALL OF THE ENERGY AND YOUTHFUL VITALITY I SEE IN THE PEOPLE EMPLOYED BY RAIL CYCLE WERE DIRECTED TOWARDS STABLE, PERMANENT, AND MORALLY ACCEPTABLE SOLUTIONS.

I INVITE WASTE MANAGEMENT, INC. AND ATCHISON, TOPEKA & SANTA FE RAILROAD TO CEASE PURSUIT OF THIS PROJECT AND RECOGNIZE AT THIS EARLY POINT IN THE PROCESS THAT THIS PROJECT IS INAPPROPRIATE. BOTH OF THESE FIRMS NO DOUBT WILL BE A PART OF WHATEVER SOLUTION IS FOUND. WERE ALL THIS PUBLIC RELATIONS MONEY FOR AN ENVIRONMENTALLY UNSOUND PROJECT INVESTED IN HIGH-TECH WASTE TREATMENT DEVELOPMENT, WASTE MANAGEMENT, INC. COULD DEVELOP PERMANENT, STABLE, AND MUTUALLY BENEFICIAL RELATIONSHIPS WITH COMMUNITIES IN WHICH IT OPERATES.

THAT'S REALLY ALL I HAD TO SAY.

MR. BLYMYER: THANK YOU, MR. KIRKHAM. MR. WILLIAM DAVIS. MR. DAVIS, I UNDERSTAND HERE THAT YOU ARE REPRESENTING C.P.R.I. IS THAT CORRECT, SIR?

MR. DAVIS: YES.

MR. BLYMYER: AND WHAT DOES C.P.R.I. STAND FOR?

MR. DAVIS: COMMITTEE FOR THE

PROTECTION OF RURAL INDEPENDENCE.

MR. BLYMYER: THANK YOU.

MR. DAVIS: THANK YOU. I HAVE ATTENDED MANY OF THESE MEETINGS. I WANT TO MAKE A STATEMENT REGARDING THE PROPOSED PROJECT TO BEGIN WITH.

WE FIND THE PROJECT TOTALLY INACCEPTABLE -- UNACCEPTABLE TO THE PEOPLE OF OUR COMMUNITY. WE AT C.P.R.I. HAVE MET, DISCUSSED THE PROJECT, STUDIED THE ENVIRONMENTAL REPORT THAT YOU HAVE PUT OUT, AND WE AGAIN STATE OUR OPPOSITION 100 PERCENT TO THE PROJECT BECAUSE WE FEAR IT WILL POLLUTE THE AIR, THE WATER, AND THE DESERT AMENITIES THAT WE APPRECIATE. THE REASON WE MOVED TO THE DESERT WAS TO GET AWAY FROM THE TRASH OF LOS ANGELES COUNTY. THANK YOU.

MR. BLYMYER: THANK YOU, SIR. BETTY CAMPBELL. AND YOU ARE REPRESENTING --

MS. CAMPBELL: THE CSA-70M. I MEAN -- THAT IS WONDER VALLEY FIRE DEPARTMENT.

MR. BLYMYER: OKAY. THANK YOU.

MS. CAMPBELL: I REPRESENT WONDER VALLEY FIRE DISTRICT, CSA-70M, WHICH IS THE DISTRICT EAST OF 29 PALMS, AND I AM AN APPOINTED COMMISSIONER ON THE ADVISORY COMMISSION. I WAS

CALLED UPON TO EXPRESS OUR CONCERNS THIS EVENING, SO I AM NOT VERY WELL PREPARED.

OUR OBJECTION AND CONCERN ABOUT THIS RAIL CYCLE DUMP IS THE IMPACT IT WOULD HAVE UPON OUR FIRE DEPARTMENT. OUR FUNDING HAS BEEN HIT VERY BADLY. OUR BUDGET IS LOW. WE ARE NOT SURE WHAT WE ARE GOING TO GET IN AUGMENTATION FUNDS, AS YOU KNOW. THERE'S -- IN SACRAMENTO, THEY ARE WORKING ON ANOTHER BUDGET, AND WE DON'T KNOW WHAT IMPACT IT WILL HAVE ON US THERE. ④

WE DO SERVICE UPON CALL, BECAUSE WE ARE THE NEAREST FIRE DEPARTMENT. WE SERVICE MINOR CAR ACCIDENTS AND SMALL FIRES IN AMBOY AREA, SOMETIMES AN ACCIDENT IN -- ON I-40. BUT THAT IS OF GREAT CONCERN TO US BECAUSE OF OUR -- THE LOCATION AND THE IMPACT IT HAS UPON OUR EQUIPMENT. ⑤

THE OTHER IMPACT AS WELL, AS THE FUNDING FOR OUR FIRE DEPARTMENT, IS THE IMPACT ON AMBOY ROAD, WHICH IS A FEEDING -- IF YOU CALL IT A HIGHWAY -- IT IS NOT AN OSHA-REGULATED ROAD. IT IS, AT THE PRESENT TIME, TAKING VERY HEAVY TRAFFIC FOR PEOPLE GOING TO LAUGHLIN, INCLUDING BIG CHARTER BUSES. ANY OTHER TRAFFIC ON THAT HIGHWAY WOULD RESULT IN A RUINED HIGHWAY. ⑥

AND ON TOP OF THAT, WE HAVE TO CONCERN

OURSELVES IN WONDER VALLEY ON OUR SCHOOL BUSES. WE HAVE SCHOOL BUSES GOING THERE EVERY DAY, GOING THROUGH THERE EVERY DAY, AND THESE -- THE PAVEMENTS ARE NOT THE BEST IN THE WORLD. FAR FROM IT. ⑦

SO WE HAVE -- WE OBJECT TO THE USE OF ANY TRAFFIC, TRUCKING OR WHATEVER, THROUGH THAT AREA, THAT PARTICULAR AREA. SO OUR CONCERNS ARE THIS: THE FUNDING THAT WOULD PUT SUCH A HEAVY IMPACT ON OUR FIRE DEPARTMENT AND, ALSO, THE PROBLEMS WITH AMBOY ROAD WHICH THE COUNTY HAS BEEN UNABLE TO FUND AND UPGRADE IN THAT AREA. THANK YOU. ⑧

MR. BLYMYER: THANK YOU VERY MUCH. FRANK GLIESING?

MR. GIESING: GIESING.

MR. BLYMYER: GIESING. EXCUSE ME, SIR.

MR. GIESING: EVERYBODY GETS IT WRONG.

MY NAME IS FRANK GIESING. I AM A HIGH DESERT DWELLER. I LIVE IN JOSHUA TREE.

THE KEY WORD THAT I WILL BE WORKING WITH HERE IS "INTEGRITY." FIRST OFF, TALKING ABOUT FALSE AND MISLEADING ADS, BROCHURES, ET CETERA, ET CETERA. THIS OUT OF "THE DESERT TRAIL"

2.6-127

(INDICATING): "OUR REPORT CARD IS IN."

OTHER THAN PEOPLE IN THIS ROOM AND MAYBE A FEW OTHERS WHO READ THIS, THEY WOULD THINK RAIL CYCLE HAD A GREEN LIGHT. THEY DON'T. WHERE'S THE INTEGRITY THERE?

IN REFERENCE TO THE EL SEGUNDO LETTER THAT WAS DATED JANUARY 3RD, 1991, WHERE EL SEGUNDO SAID ABOUT THE PRESENTATION THAT WAS MADE TO THEM, ET CETERA, WAS, QUOTE, "MISLEADING AT BEST," UNQUOTE. WHERE'S THE INTEGRITY THERE?

NOW WE HAVE SOMETHING NEW COMING ON THE HORIZON WHERE AB-223 IS RIGHT AROUND THE CORNER. AB-223, BY MR. QUACKENBUSH FROM SAN JOSE, WANTS TO DO AWAY WITH ALL THE AIR QUALITY DISTRICTS AND HAVE IT ALL UNDER ONE UMBRELLA UNDER THE STATE. NOW, WHAT DOES THAT MEAN AS FAR AS OUR MOJAVE AIR QUALITY? YOU CAN GUESS. WHERE'S THE INTEGRITY THERE? ⑨

NOW, ON LANDFILL INTEGRITY, WITH THE LINER FAILURES, WITH NO PROVEN AND HIGHLY QUESTIONABLE CAP INTEGRITY, WHERE'S THE INTEGRITY THERE? ⑩

THE GEOLOGY IS NOT SUITABLE FOR A LANDFILL. SO WHERE WAS THE INTEGRITY THERE WHEN THE STUDIES WENT ON? ⑪ THIS EIR/EIS IS FLAWED

ALMOST FROM ONE END TO THE OTHER, BECAUSE CERTAIN THINGS WERE ASSUMED THAT WEREN'T NECESSARILY TRUE.

NOW, ONE OF THE THINGS THAT REALLY BOTHERS ME REGARDING THIS EIR/EIS, A COUPLE PLACES WITHIN THAT DOCUMENT, REQUESTS WERE MADE ABOUT ALTERNATIVES -- NOT ALTERNATIVE SITINGS -- ALTERNATIVES, WHICH WERE NOT EVEN TOUCHED. ⑫

NOW, SINCE ALTERNATIVE METHODS HAVE NOT BEEN CONSIDERED ALONG, WITH NUMEROUS ENVIRONMENTAL AND ANTI-TRUST VIOLATIONS, HOW CAN B.L.M. EVEN THINK OF DEALING WITH THESE PEOPLE? WHERE IS THE INTEGRITY IN ALL OF THIS? ⑬

I THINK IT IS HIGH TIME THAT THE ATTORNEY GENERAL DO A LITTLE INVESTIGATING LIKE THE DISTRICT ATTORNEY DID DOWN IN SAN DIEGO THAT CAME UP WITH A VERY UNFAVORABLE, TO SAY THE LEAST, REPORT ON THIS OUTFIT. THANK YOU VERY MUCH. ⑭

MR. BLYMYER: THANK YOU, SIR. ESTHER HERBERT? ARE YOU REPRESENTING ANYBODY?

MS. HERBERT: NO. I INTEND TO SUBMIT A MORE DETAILED REPORT ON THE DRAFT IN WRITING, BUT I'D LIKE TO PRESENT MY GENERAL CONCERNS TONIGHT.

ALTHOUGH I AM VERY CONCERNED ABOUT SPECIFIC ITEMS IN THE DRAFT, PARTICULARLY RELATING

TO WATER, AIR QUALITY, AND VISUAL QUALITY, WHICH CANNOT BE MITIGATED, ACCORDING TO THE DRAFT ITSELF, MY PRIMARY CONCERN IS THE IDEA OF THE BOLO STATION LANDFILL. I DO NOT THINK THAT THIS DESERT AREA SHOULD BE THE DUMP GROUND FOR THE REST OF THIS COUNTY AND OTHER COUNTIES. THERE ARE OTHER PROVEN WAYS TO BREAK DOWN MUCH OF THE TRASH WHICH ⑮ CANNOT BE RECYCLED WITHOUT DAMAGE TO THE ENVIRONMENT. THERE ARE PLACES IN THE COUNTRY THAT YOU CAN GO AND SEE WHERE THIS HAS BEEN DONE.

THE BOLO LANDFILL OFFERS NOTHING NEW, ONLY MORE OF THE SAME. WE OWE IT TO OURSELVES AND THOSE OF THE NEXT CENTURY TO CONSIDER MORE INNOVATIVE SYSTEMS RATHER THAN THIS ONE. THIS ONE PRIMARILY BENEFITS, AS I SEE IT, THE RAIL SYSTEM AND A COMPANY WHICH ONLY CREATES A LARGER GARBAGE DUMP IN OUR BACKYARD. THIS COMPANY HAS BEEN INVOLVED IN LITIGATION THROUGHOUT THE COUNTRY FOR THE PAST SEVERAL YEARS AND I THINK IT BEHOOVES THE ⑯ B.L.M. TO MAKE A THOROUGH INVESTIGATION OF WHAT THEY HAVE BEEN UP TO. THANK YOU.

MR. BLYMYER: KATRINA STEVENS?

MS. STEVENS: THAT'S ME. I HAVE NO COMMENTS.

MR. BLYMYER: THANK YOU. LOUIS

GONZALEZ, FARM MANAGER, CADIZ LAND COMPANY?

MR. GONZALEZ: GOOD EVENING, FOLKS. MY NAME IS LOUIS E. GONZALEZ, AND I AM A MANAGER OF THE FARMING OPERATIONS OUT AT THE CADIZ LAND COMPANY. WE CURRENTLY FARM ABOUT 1440 ACRES OF GRAPES AND CITRUS.

FOR THOSE OF YOU WHO AREN'T FAMILIAR WITH CADIZ, IF YOU ARE HEADING EAST ON AMBOY ROAD, OVER TO ROUTE 66, IT GOES AMBOY, BOLO, AND THEN CADIZ. THIS LITTLE MAP BASICALLY -- I WILL POINT TO IT WHEN WE GET CLOSE TO THE PLACE. BUT ANYWAY, AS I CONTINUE, CADIZ LAND COMPANY PLANS TO EXPAND OUR AG OPERATIONS TO A TOTAL OF 9,600 PLANTED ACRES. WE CURRENTLY OWN 26,000 ACRES IN THE CADIZ VALLEY.

UNIDENTIFIED SPEAKER: HOLD THE MIKE CLOSER TO YOUR MOUTH, PLEASE.

MR. GONZALEZ: OH, OKAY.

WE CURRENTLY OWN 26,000 ACRES IN THE CADIZ VALLEY, WHICH IS ABOUT 42 SECTIONS. THESE ⑰ 42 SECTIONS LIE APPROXIMATELY ONE MILE FROM THIS DUMP SITE. SO IF YOU LOOK AT THE GREEN AREA, THAT'S BASICALLY ALL OF OUR PROPERTY, AND THE GRAY AREA IS WHERE THE DUMP SITE WILL BE, WHICH IS ABOUT, AT ITS CLOSEST PROXIMITY, ONE MILE. WE ⑱

⑱ CONT.

BELIEVE THE DRAFT EIR DOES NOT ADDRESS THE IMPACTS OF THIS PROPOSED WASTE DUMP ON OUR FARMING OPERATION.

OUR FARM PROPERTY LIES IN REMARKABLY FERTILE CADIZ VALLEY, WHICH HAS A UNIQUE MICROCLIMATE SITUATED IN THE HIGH DESERT. PRESERVING THE ENVIRONMENTAL QUALITY OF THIS PRISTINE VALLEY IS CRITICAL TO OUR CURRENT FARMING OPERATIONS AND PLANS FOR FUTURE EXPANSION. THIS AG PROJECT IS A UNIQUE OPERATION. THE QUALITY OF OUR WATER AND OUR VERY FERTILE SOILS ENABLES US TO PRODUCE SUPERIOR QUALITY FOOD PRODUCTS. CADIZ LAND COMPANY HAS DEMONSTRATED THIS IN THE RECENT PAST. OUR TABLE GRAPES HAVE REACHED NOT ONLY U.S. NO. 1, BUT EXPORT GRADE AND EXPORT EXTRA FANCY GRADE. WE HAVE HAD OUR PRODUCT SHIPPED ALL OVER THE WORLD. LAST YEAR, WE HAD GRAPES THAT WENT TO NEW ZEALAND, HONG KONG, CANADA, AND THE U.K., DIFFERENT PARTS OF THE WORLD. AND WE ALSO SHIP TO MANY CHAIN STORES DOMESTICALLY AND ALL OVER THE UNITED STATES.

WE ARE CURRENTLY ONLY GROWING CITRUS AND GRAPES ON A COMMERCIAL BASIS, BUT MANY TRIALS ARE UNDER WAY TO DIVERSIFY AND SPECIALIZE IN CROPS THAT CANNOT BE GROWN ANYWHERE ELSE BUT IN A DESERT

MICROCLIMATE, LIKE WE HAVE HERE IN CADIZ. WE ARE JUST BEGINNING TO TAP THE AGRICULTURAL POTENTIAL IN THE CADIZ VALLEY, AND IT'S AN ABSOLUTE TRAGEDY THAT OUR PEST-FREE FIELDS COULD SOON BE INFESTED WITH RODENTS, INSECTS, BIRDS AND, FURTHER, WITH AIRBORNE DISEASES AND SOILBORNE DISEASES IF THIS WASTE DUMP CONTINUES. HAVE THESE ISSUES BEEN ADDRESSED? ⑲

IN OUR FARMING PRACTICES AT THE CADIZ AG PROJECT, WE USE VERY MINIMAL PESTICIDES. BECAUSE OF STRICT EPA REGULATIONS, ALL MATERIALS USED IN FARMING OPERATIONS CARRY AN EPA NUMBER, BUT AS FAR AS REAL PESTICIDES GO, THE ONES THAT YOU ARE ALL FAMILIAR WITH, WE ARE NONEXISTENT. THIS HAS ALLOWED US TO APPLY FOR ORGANIC PERMITS, AND WE ARE CURRENTLY GROWING ORGANIC RAISINS AND HAVE BEEN ASKED IN THE FUTURE TO GROW ORGANIC CITRUS. IN ORDER TO GROW ORGANIC PRODUCE -- YOU BASICALLY JUST DON'T START GROWING ORGANIC PRODUCE AND NOT SPRINKLE IT WITH FERTILIZER AND MATERIALS. YOU MUST DECERTIFY. AND DECERTIFICATIONS FOR AN ORGANIC RATING ARE VERY, VERY DIFFICULT TO COME BY. BECAUSE OF OUR UNIQUE AREA IN THE CADIZ VALLEY, WE ARE ABLE TO BECOME CERTIFIED. IN ALL OF MY YEARS OF FARMING, WHICH ARE 13 NOW, THIS IS

THE FIRST PLACE I'VE EVER BEEN AT WHERE WE WERE ABLE TO BECOME CERTIFIED FOR ORGANIC FARMING.

WE HAVE ADOPTED MANY CULTURAL PRACTICES DESIGNED TO PROTECT OUR NATURAL ENVIRONMENT, AND WE ROUTINELY TAKE PRECAUTIONS TO PREVENT ANY VECTOR OR VIRUS FROM ENTERING OUR FIELDS. FOR EXAMPLE, WE WASH AND DISINFECT ALL FARMING EQUIPMENT AS THEY COME IN FROM THE FIELD. ANY HAND TOOL THAT IS USED FOR PRUNING OR CUTTING IS RINSED OR DIPPED IN BLEACH AT THE END OF THE DAY OR THE BEGINNING OF THE DAY SO WE DON'T SPREAD ANY DISEASES OR ANY VECTORS THAT WILL CAUSE DISEASE IN THE FUTURE. SO RIGHT NOW, WITHOUT THIS DUMP SITE BEING A MILE FROM US, WE TAKE EVERY PRECAUTION POSSIBLE. YOU CAN IMAGINE WHAT WOULD HAPPEN IF THE DUMP SITE IS ONE MILE FROM US. ⑳

ABUNDANT HIGH-QUALITY WATER IS AVAILABLE FOR AG AND DOMESTIC USE. WATER QUALITY IN THE AREA IS RATED "VERY GOOD," WITH REPORTED TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN THE RANGE OF 200 MILLIGRAMS PER LITER. THIS IS CONSIDERED BOTTLE-QUALITY WATER. WE COULD BOTTLE WATER FROM THE CADIZ AREA. WE CURRENTLY HAVE FIVE AGRICULTURAL WELLS ON THE PROPERTY. EACH WELL SUPPLIES APPROXIMATELY 2,000 GALLONS PER MINUTE.

LET ME REPEAT THAT. TWO THOUSAND GALLONS PER MINUTE. ALL CROPS ARE IRRIGATED BY A FULLY AUTOMATED, STATE-OF-THE-ART DRIP OR MICROSPRINKLER SYSTEM WHICH DELIVERS ABOUT A 97 PERCENT EFFICIENCY FACTOR, MEANING THAT WE DON'T WASTE ANY WATER.

IN CONCLUSION, A SOLID WASTE OPERATION LOCATED NEXT TO FOOD PRODUCTION IS NOT COMPATIBLE ㉑ UNDER ANY CIRCUMSTANCES. THE PROPOSED WASTE DUMP WOULD BE DEVASTATING TO OUR FARMING OPERATION. ㉒ THE DRAFT EIR DOCUMENTS CERTAIN IMPACTS TO OUR GROUNDWATER AND AIR QUALITY, BUT IT FAILS TO IDENTIFY MANY OTHER SIGNIFICANT IMPACTS TO AGRICULTURE SUCH AS EARTHQUAKES -- DO WE HAVE ㉓ EARTHQUAKES IN THIS AREA? -- FLOOD AND EROSION ㉔ HAZARDS. IF THIS LAND TRANSFER AND WASTE PROPOSAL IS ALLOWED TO PROCEED, IT WILL HAVE SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS THAT WILL DEVASTATE THE VIABILITY OF OUR PRESENT AND FUTURE AGRICULTURAL OPERATIONS. ㉕ WE SHOULD ALL REMEMBER THAT FARMING HAS BEEN THE BACKBONE OF AMERICA FOR HUNDREDS OF YEARS. LET'S NOT HAVE THIS WASTE DUMP CHANGE THAT. THANK YOU. (APPLAUSE.)

MR. BLYMYER: MR. ALLEN BARLER?

MR. BARLER: I WROTE DOWN THAT I AM

REPRESENTING MY SONS IN THIS MEETING IN THE SENSE THAT MY YOUNG BOYS ARE RECYCLING IN THE HOUSEHOLD AT 29 PALMS, AND THEY ARE IN CHARGE OF THE ALUMINUM CANS, THE PLASTICS. THEY ARE IN CHARGE OF THE COMPOST PILE THAT GOES WHERE THINGS GO OUTSIDE THAT WE CAN COMPOST, COME BACK INTO THE GARDEN, COME BACK INTO OUR PLANTS AROUND THE HOUSE. I WONDER HOW MANY PEOPLE IN LOS ANGELES WHERE THESE THINGS ARE COMING FROM GO THROUGH THOSE ACTIVITIES TO RECYCLE, CONSERVE THEIR CONSUMABLES INSTEAD OF SENDING THEM OUT TO US AS A PRESENT. ㉖

I LOOKED AT THESE THINGS RIGHT BACK HERE. THESE ARE 29 PALMS HIGH SCHOOL TRASH CANS. THEY'RE REALLY NICE. NICE YELLOW. I LIKE THEM. THE HIGH SCHOOL KIDS ON THIS CAMPUS ARE RECYCLING. THEY HAVE BINS AROUND THE SCHOOL. NOT ONLY THIS TRASH THAT GOES OUT TO OUR DUMP OUT HERE WHICH THE KIDS DUMP INTO, THEIR FOOD EXCESS, SO FORTH, BUT ALSO THE PAPERS, THE METALS, THE ALUMINUM ARE RECYCLED BY THIS CAMPUS IN TERMS OF RECYCLING AND TRYING TO CUT DOWN ON WHAT WE THROW AWAY. I WONDER, ONCE AGAIN, WHAT IS LOS ANGELES DOING FOR US AS THEY LOAD THESE CARS UP AND BRING IT OUT THIS DIRECTION? ㉗

I THINK THIS ACTION OF THE CARS TO THE SITE OUT HERE PAST AMBOY IS AN OPEN DOOR TO L.A., SAYING, "DON'T WORRY ABOUT A THING. WE'LL TAKE YOUR TRASH. WE'LL TAKE EVERYTHING. GO ON WITH LIFE AS USUAL. JUST DUMP IT OUT HERE. DON'T EVEN -- JUST -- AS A MATTER OF FACT, USE MORE AND JUST THROW IT IN HERE AND SEND IT OUR DIRECTION." ㉘ THAT'S MY CONCERN. MY CONCERN IS FOR MYSELF, THIS CAMPUS, AND MY TWO SONS. THANK YOU. (APPLAUSE.)

MR. BLYMYER: THANK YOU. DO WE HAVE ANY OTHER PEOPLE HERE TONIGHT THAT WOULD LIKE TO MAKE A STATEMENT? THAT'S THE END OF THE FOLKS THAT HAVE REGISTERED EARLIER.

YES, MA'AM? PLEASE STATE YOUR NAME AND WHO YOU REPRESENT.

MS. MASKER: MY NAME IS D. J. MASKER. I HAVE LIVED IN 29 PALMS APPROXIMATELY 25 YEARS, OFF AND ON.

YOU FOLKS ARE ALL WAY AHEAD OF ME. WHEN I HEARD THIS PUBLIC MEETING WAS GOING TO BE AVAILABLE FOR US TO SPEAK ON THIS, I COULDN'T RESIST. WHAT IS 29 PALMS TO GAIN BY HAVING THIS IN OUR BACKYARD? WHAT? NOBODY HAS PUBLISHED ONE IOTA OF EVIDENCE THAT WE GAIN. WE ONLY STAND TO LOSE. I DON'T KNOW WHERE I CAN GET INFORMATION

2.6-132

THAT SAYS THERE'S GOT TO BE A PAYOFF HERE SOMEWHERE. IS IT B.L.M.? IS IT SAN BERNARDINO COUNTY? SOMEBODY IS PROFITING FROM THIS. THOSE ARE THE PEOPLE THAT WE MUST TALK TO.

CAN WE SHARE THEIR PROFITS? NO. WE ONLY HAVE TO LOSE. I WOULD HOPE THAT SOME OF YOU HAVE AN OPPORTUNITY TO GET TO THE MEETING TOMORROW. WE HEARD ABOUT IT TONIGHT. THAT DOESN'T GIVE US MUCH TIME TO GET PREPARED, BUT I HOPE SOME OF YOU HAVE THE OPPORTUNITY TO GET TO SAN BERNARDINO TOMORROW TO CONTINUE THE FIGHT FOR 29 PALMS. WE DON'T NEED L.A.'S GARBAGE. L.A. IS GENERATING THEIR OWN. LET THEM TAKE CARE OF IT. I AM ALL FOR HELPING SOMEBODY THAT NEEDS HELP, BUT, HEY, THEY'RE DUMPING ON US, FOLKS. DON'T LET THEM DO IT. THANK YOU. (APPLAUSE.)

㉙

MR. BLYMYER: THANK YOU. DO WE HAVE ANY OTHER PEOPLE THAT WOULD LIKE TO MAKE COMMENTS?

MS. FOX: I'M MAD. I AM NOT PREPARED FOR THIS AT ALL, BUT I AM --

MR. BLYMYER: PLEASE STATE YOUR NAME.

MS. FOX: DONNA FOX. HI, FELLOW RESIDENTS. MY NAME IS DONNA FOX. I AM RIGHT WITH THAT LADY THAT SPOKE BEFORE ME. I JUST GOT IN ON

THIS, AND I AM FURIOUS ABOUT THIS.

UNIDENTIFIED SPEAKER: WE CAN'T HEAR YOU.

MS. FOX: YOU CAN'T HEAR ME?

UNIDENTIFIED SPEAKER: KEEP THE MIKE STILL.

MS. FOX: OKAY. I'M NOT USED TO THIS.

I CAN'T UNDERSTAND WHAT'S HAPPENING IN OUR TOWN AND OUR COMMUNITY HERE. WE DON'T HAVE ANYTHING VIABLE GOING ON HERE, SUCH AS ANYTHING -- EXCEPT WAL-MART AND THINGS LIKE THAT GOING ON, BUT EVERYONE WANTS TO USE US FOR A DUMP SITE FOR EVERYTHING, A GARBAGE -- DO THIS. DO THAT. THEY WANT TO RUIN OUR ENVIRONMENT.

I DON'T UNDERSTAND. WHY SHOULD WE TAKE L.A.'S GARBAGE? OR ORANGE COUNTY'S? WE CAME HERE FOR THE CLEAN, PRISTINE HERE AIR. I CANNOT BELIEVE THAT PEOPLE WOULD TRY TO DUMP LOS ANGELES'S TRASH IN OUR BACKYARD. WE AREN'T BIG ENOUGH TO HANDLE IT. THIS IS PRISTINE AIR. WE CAME OUT HERE TO ENJOY IT. WE LIKE IT. IF WE WANTED TO LIVE IN THE CITY, WE'D LIVE IN THE CITY, FOR PETE'S SAKE. I DON'T UNDERSTAND HOW ANOTHER COUNTY IN FACT COULD SEND IT TO OURS AND DECIDE

THAT THEY ARE GOING TO DUMP IT ON US WHEN WE TRY VERY HARD TO KEEP THIS PLACE VERY CLEAN.

WHAT WE NEED HERE IS CLEAN-AIR INDUSTRY TO PROMOTE SOME KIND OF A REVENUE IN THIS CITY AND TO KEEP ON GROWING, AND WE DON'T NEED THIS KIND OF THING IN OUR BACKYARD. THANK YOU.

MR. BLYMYER: ANYBODY ELSE LIKE TO MAKE A STATEMENT? YES, SIR? PLEASE STATE YOUR NAME FOR THE RECORD.

MR. SIEGMUND: ALL RIGHT. YES. MY NAME IS MARK SIEGMUND. I AM ASSOCIATE EDITOR OF "THE INTERNATIONAL JOURNAL OF" -- (UNINTELLIGIBLE). AND I WASN'T GOING TO SPEAK, BUT I AM BECOMING REALLY -- I MEAN, I -- I ENJOY THE AREA AROUND THE EAST AREA, AMBOY. I HIKE THROUGH THERE. I VISITED THE AGRICULTURAL SECTION. I KNOW WHAT THIS PREVIOUS SPEAKER WAS SPEAKING OF. IT'S EMPLOYING A LOT OF PEOPLE AND IT'S BEAUTIFUL IN THAT ENTIRE AREA. IT'S -- THE THOUGHT OF IT BEING SPOILED, PARTICULARLY ALONG HIGHWAY 66, WHICH IS A SCENIC AND HISTORIC ROUTE, ㉚ WHICH IS RIGHT THERE WHERE THE DUMP IS GOING TO BE -- I HAVE A SUGGESTION, THAT THE COUNTY APPROACH THE MARINE CORPS WHICH HAS SOME 500,000 ㉛ ACRES THERE THAT THEY ARE BOMBING ALL THE TIME.

WE ARE ALREADY UNDER ASSAULT BY THE MARINES, AT LEAST WHERE I LIVE. WHY NOT PUT THE DUMP THERE ON ㉛ CONT. THE MARINE BASE AND LET THEM BOMB IT? THANK YOU.

MR. BLYMYER: ANYONE ELSE CARE TO MAKE A STATEMENT?

MS. STEVENS: I WOULD LIKE TO MAKE A STATEMENT.

MR. BLYMYER: YES, MA'AM. CAN WE HAVE YOUR NAME AND ADDRESS FIRST.

MS. STEVENS: MY NAME IS KATRINA STEVENS. THE COMMENT I WOULD LIKE TO MAKE IS THAT I DON'T FEEL THAT THE B.L.M. HAS NOTIFIED THE PUBLIC. I KNOW IT WAS IN -- IN "THE DESERT TRAIL" SEVERAL WEEKS AGO, AND I PUT IT UP ON MY REFRIGERATOR. DIDN'T PAY MUCH ATTENTION TO IT OTHER THAN THE DATE. AND I CALLED THE RADIO STATION TODAY AND I ASKED, I SAID, "WELL, WHY AREN'T YOU ADVERTISING OR LETTING THE PUBLIC KNOW ㉜ ABOUT THIS MEETING TONIGHT?" AND THEY SAID, "WELL" -- THAT THEY WERE NOT NOTIFIED.

SO BASICALLY WHAT I SEE IS THAT THE B.L.M. HAS COVERED THEIR TRACKS BY SAYING THAT THEY HAVE NOTIFIED THE PUBLIC, BUT, REALLY, I DON'T FEEL THAT THE PUBLIC -- I THINK THERE'S A LOT MORE PEOPLE OUT THERE THAT WOULD COME TO THIS

MEETING IF THEY, YOU KNOW, HAD BEEN NOTIFIED PROPERLY. THANK YOU.

㉜ CONT.

MR. BLYMYER: THANK YOU. ANYBODY ELSE CARE TO MAKE A COMMENT, A STATEMENT? CAN WE HAVE YOUR NAME FOR THE RECORD, PLEASE.

MR. SCOTT: I AM RANDY SCOTT WITH THE SAN BERNARDINO COUNTY PLANNING DEPARTMENT. I JUST WANTED TO -- IF EVERYONE IS FINISHED COMMENTING, I JUST WANTED TO EXPLAIN FOR YOUR BENEFIT SO YOU CAN UNDERSTAND THE COUNTY'S PROCESS IN REVIEW OF THE PROJECT.

WE ARE JOINTLY REVIEWING THE PROPOSAL WITH THE B.L.M. THE COUNTY HAS AN APPLICATION BEFORE THEM FROM RAIL CYCLE FOR A CONDITIONAL USE PERMIT TO ESTABLISH THE LANDFILL. THE ENVIRONMENTAL REVIEW THAT'S ONGOING RIGHT NOW IS PREPARED INDEPENDENTLY BY AN ENVIRONMENTAL CONSULTANT UNDER CONTRACT TO THE COUNTY AND TO THE B.L.M.

2.6-134

THE COMMENTS THAT ARE MADE TONIGHT AND AS WELL AS MONDAY NIGHT AND TOMORROW NIGHT, IN ADDITION TO THE COMMENTS THAT WILL BE RECEIVED THROUGH WRITTEN CORRESPONDENCE, WILL BE RESPONDED TO BY THE CONSULTANT AND PUT TOGETHER IN THE FORM OF A FINAL EIR/EIS. THAT WILL BE DISTRIBUTED JUST

IN THE SAME MANNER THAT THE DRAFT WILL BE DISTRIBUTED, AND PEOPLE WILL HAVE AN OPPORTUNITY TO SEE WHAT THE RESPONSE IS TO THE COMMENTS THAT THEY'VE MADE.

THAT, ALONG WITH AN ANALYSIS BY THE PLANNING DEPARTMENT, THEN WILL BE FORWARDED TO THE PLANNING COMMISSION, AND THE PLANNING COMMISSION WILL CONSIDER THAT BEFORE -- OR DURING A PUBLIC HEARING. THE PLANNING COMMISSION THEN WILL MAKE RECOMMENDATIONS ON TO THE BOARD OF SUPERVISORS. THEY HAVE THE FINAL ACTION WITH REGARDS TO THE COUNTY APPLICATIONS FOR LAND USE, FOR ESTABLISHING THE LANDFILL.

SO THAT IS A QUICK SYNOPSIS OF THE KIND OF PROCESS THAT THE COUNTY WILL USE TO CONSIDER THE PROPOSAL. THERE WILL BE AT LEAST TWO PUBLIC HEARINGS WHERE PEOPLE WILL HAVE AN OPPORTUNITY TO COMMENT AND EXPRESS THEIR CONCERNS OR OPINIONS ON THE PROJECT IN ADDITION TO COMMENTING ON JUST THE ENVIRONMENTAL ASPECTS. AND THOSE HEARINGS WILL BE WITH THE PLANNING COMMISSION AND THE BOARD OF SUPERVISORS.

UNIDENTIFIED SPEAKER: ANY BALLPARK FIGURE WHEN THEY WILL BE? JUST AN ESTIMATE?

MR. SCOTT: WE ARE ANTICIPATING EARLY

SUMMER. AND IT'S HARD TO SAY. DEPENDING ON WHAT'S REQUIRED, HOW MUCH WORK GOES INTO THE RESPONSE, TO THE COMMENTS, IF ADDITIONAL ANALYSIS IS REQUIRED, SO ON. BUT THAT'S KIND OF OUR BEST GUESS AT THIS POINT.

MR. WILLIAMS: ONE OTHER QUESTION. ALL OF THESE HEARINGS ARE APPEALABLE, AREN'T THEY?

MR. SCOTT: PARDON ME?

MR. WILLIAMS: ALL OF THE ACTIONS OF THE PLANNING COMMISSION AND THE BOARD OF SUPERVISORS IS APPEALABLE?

MR. SCOTT: WELL, PEOPLE WILL HAVE AN OPPORTUNITY TO COMMENT, EXPRESS THEIR CONCERNS AT THE PLANNING COMMISSION. IF THE PLANNING COMMISSION WAS THE, YOU KNOW, FINAL DECISION-MAKING BODY, THEN IT COULD BE APPEALED, BUT IT'S GOING ON TO THE BOARD OF SUPERVISORS, WHICH IS THE LAST AUTHORITY IN THE COUNTY ANYWAY. SO TECHNICALLY, IT'S NOT APPEALABLE, BECAUSE THE BOARD WILL ACT ON IT.

MR. WILLIAMS: IT'S APPEALABLE TO THE BOARD; RIGHT?

MR. SCOTT: WELL, THE BOARD -- SEE, IT'S GOING TO THE BOARD ANYWAY, SO YOU DON'T HAVE

TO APPEAL IT TO THE BOARD. YOU WILL HAVE AN OPPORTUNITY TO ADDRESS IT BEFORE THE BOARD ANYWAY.

AND I DIDN'T WANT TO GET INTO A QUESTION-AND-ANSWER KIND OF SITUATION. THAT'S NOT THE INTENT OF TONIGHT'S MEETING. THIS IS REALLY THE B.L.M.'S COROLLARY TO THEIR ENVIRONMENTAL PROCESS. SO WITH THAT, I WILL BE GLAD TO -- YOU KNOW, I WILL STICK AROUND AFTER THE MEETING IS OVER AND ANSWER ANY FURTHER QUESTIONS THAT YOU HAVE.

MR. BLYMYER: THANK YOU, MR. SCOTT. DO WE HAVE ANY FURTHER STATEMENTS? ANYBODY ELSE THAT WOULD LIKE TO -- OKAY. NO FURTHER STATEMENTS BEING MADE, THIS HEARING IS NOW CLOSED AT 1941 HOURS.

UNIDENTIFIED SPEAKER: EXCUSE ME. CAN I ASK A QUESTION? IS THERE A PETITION GOING AROUND TO STOP THEM FROM COMING INTO -- YOU KNOW, FROM DUMPING THIS STUFF BY AMBOY?

MR. BLYMYER: I AM NOT AWARE OF ANY PETITIONS.

MS. FOX: CAN I ASK? I WANT TO KNOW SOMETHING TOO. WHAT IS THE IMPACT OF OUR VOICE HERE, THAT WE ARE SUCH A SMALL COMMUNITY? CAN WE

REALLY OVERTHROW WHAT THEY ARE GOING TO DO TO US?

MR. BLYMYER: ANYBODY THAT HAS ANY QUESTIONS, COME ON UP AND I WILL TRY TO ANSWER THEM PRIVATELY.

(THE PROCEEDINGS WERE ADJOURNED AT 7:42 P.M.)

-OOO-

REPORTER'S CERTIFICATE

STATE OF CALIFORNIA)
) SS.
COUNTY OF RIVERSIDE)

I, DIANE L. MARTIN, A CERTIFIED SHORTHAND REPORTER, DO HEREBY CERTIFY THAT THE FOREGOING 31 PAGES COMPRISE A FULL, TRUE, AND CORRECT TRANSCRIPTION OF THE PROCEEDINGS HAD AND THE TESTIMONY TAKEN AT THE HEARING IN THE HEREINBEFORE-ENTITLED MATTER.

DATED THIS 20TH DAY OF FEBRUARY, 1993, AT RIVERSIDE, CALIFORNIA.

Diane L. Martin

DIANE L. MARTIN, C.S.R., R.P.R., C.M.
C.S.R. NO. 8268

DOCUMENT 094
BLM PUBLIC HEARING TRANSCRIPT
TWENTYNINE PALMS, CALIFORNIA - FEBRUARY 10, 1993
RESPONSE TO COMMENTS

Response 094-1

1. The commenter is correct that the statement on page 5.7-18 of the Draft EIR/EIS is inconsistent with the SCAQMD's Air Quality Management Plan Measure No. A-D-1. The AQMP measure not only assumed that transport is by electrified railroad lines, but it also was based on transport of refuse derived fuel, not solid waste, to out of basin energy recovery facilities. Therefore, AQMP Measure No. A-D-1 is not relevant to the Rail•Cycle project. This inconsistency was noted in Section 4.4.2 of the Supplement.

Response 094-2

1. Sections 4.4 and 5.4 of the Supplement presented a refined evaluation of potential air quality impacts associated with the No Action Alternative.

Response 094-3

1. See Response 094-1.

Response 094-4

1. The Rail•Cycle project and surrounding community are served by the County Forestry and Fire Warden Department. The County Forestry and Fire Warden Department would provide emergency services for the proposed action and surrounding community through a new County fire station to be constructed by Rail•Cycle near the entrance of the proposed landfill. Appropriate firefighting equipment and County firefighting personnel would be provided at this new fire station. County fire personnel will be trained as Emergency Medical Technicians and HAZMAT fire responders.

2. The County Forestry and Fire Warden Department has reviewed the requirements of the proposed action, including the transport of waste-by-rail through the High Desert portion of the County, and has determined that the proposed action would not have a significant impact on the Department's ability to provide emergency services (Miller, 1993). Rail•Cycle, as with all citizens and private enterprises, would be responsible for civil cost recovery under the California Health and Safety Code 13009.

3. The Wonder Valley Fire Department has no legal requirement to provide services outside its district, except for its mutual aid agreements.

Response 094-5

1. It is expected that the establishment of a new County fire station at the entrance to the proposed landfill (see Response 094-4) would decrease the requirements for the Wonder Valley Fire Department to service the Amboy area. To the extent that emergencies could be handled by personnel and equipment at the new station, the Wonder Valley Fire Department would not be involved.

Response 094-6

1. Roadways would be affected by employee and nonemployee traffic, based on the number of new employees that move into the area in response to the proposed action. As discussed in Section 5.15 of the Draft EIR/EIS, it is estimated that the number of employees that may commute to the site from the Morongo Basin would be about 130 for project construction and about 100 for operations. At an estimated 1.2 employees per vehicle, this would result in additional employee traffic of approximately 110 vehicles for project construction and 85 vehicles for operations.

2. It is expected that Amboy Road would be most affected, with project-related personnel and other vehicles being added to the existing levels of about 630 vehicles per day. Amboy Road has a capacity of about 12,000 vehicles per day. With an average daily traffic volume of 630 vehicles, Amboy Road is currently operating at a LOS of A. The increase in traffic volume to 740 vehicles per day due to the proposed action would not result in a reduction of the LOS on Amboy Road and so would not have a significant effect. No requirements to upgrade the roadway is expected due to the proposed action. Maintenance of Amboy Road is a County responsibility and, assuming that most of the traffic between the Morongo Basin and the site consists of personal vehicles, there would not be additional maintenance requirements.

Response 094-7

1. As noted in the Response 094-6, the average daily traffic on Amboy Road is expected to increase from about 630 to 740 vehicles per day. This increase would not result in a change from the existing LOS of A. Because most of the project-related traffic is expected to consist of personal vehicles, damage to the road surface is not anticipated. Road maintenance would continue to be provided through gasoline taxes, which would increase with additional population that may move into the area.

2. Because the landfill would operate more than one shift of workers per day, the increased traffic would occur in accordance with shift changes and be spread over a 24-hour period. The extent to which some of the additional traffic would share the roads with school buses is not known at this time.

Response 094-8

1. The location of the landfill will determine both the destination and the routing of vehicles to the facility. The Draft EIR/EIS recognizes that heavy trucks are responsible for most road wear. Section 5.1.2.5 of the Draft EIR/EIS identified mitigation measures that Rail•Cycle would implement to reduce the effects of the overall increase in traffic and of landfill-related trucking on the road surface:
   - Addition of turning lanes on Route 66 at the entrance to the landfill.
   - In the event that project implementation requires the importation of clay materials via trucks from a source that requires the use of public roads for landfill construction, the applicant shall be responsible for a proportional share of the maintenance and repairs to Kelbaker Road from Interstate 40 to National Trail Highway, and National Trails Highway from Kelbaker Road to the project entrance.
   - Company-sponsored ride sharing or busing from areas where large numbers of employees reside.

2. Potential effects to the Wonder Valley Fire Department are not expected, as the proposed project includes a new fire/paramedic/sheriff station and helipad that would service the landfill and surrounding communities (see Response 094-5; and Draft EIR/EIS, Sections 3.3.3.6 and 3.3.3.7).

Response 094-9

1. The effects of proposed legislation, such as the recently introduced AB 223, may be of concern to the citizens of the state. However, as this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required.

Response 094-10

1. The proposed landfill liner and alternate landfill liner systems were described in Section 3.2.4.1 of the Supplement. Based on a exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However the authors clearly make a distinction between liners and liner systems. Further, they state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions."

2. As detailed in Chapter 3.0 of the Supplement, the proposed action includes a double liner composite system and UZM system to provide 100 percent monitoring coverage under the liner. This monitoring system would provide sufficient time to implement corrective action in the event of a release. The measures included in the EIR/EIS are considered sufficient to mitigate potential ground water quality impacts from the proposed action.

Response 094-11

1. The geophysical survey and trenching analysis requested by the RWQCB was completed to verify the presence or absence of active and potential active faults at the proposed site (Jacobs, 1993a). This analysis confirmed the previous findings and conclusions that there are no Holocene faults at or trending towards the proposed site. For a complete discussion of the results of this verification analysis, see Chapters 4.0 and 5.0 of the Supplement.

Response 094-12

1. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as

increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective of the proposed action to provide an environmentally safe landfill disposal option to southern California communities after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, which was developed in response to a request by the Los Angeles County Sanitation Districts for long-term landfill capacity, would meet that need by helping satisfy the state's requirements, mandated by AB 939, for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise be feasibly reduced at the source, recycled, or composted.

2. Alternative waste management practices conducted by Rail•Cycle were eliminated from further detailed analysis in the EIR/EIS because waste transported to the site would be post-recycled waste or waste processed through MRFs. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this issue, see Section 3.3 of the Supplement.

Response 094-13

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 094-14

1. See Response 094-13.

Response 094-15

1. See Response 094-12.

Response 094-16

1. See Response 094-12.

Response 094-17

1. It is acknowledged the CLC's land holdings are located approximate one mile from the Bolo Station site. No specific response is required.

Response 094-18

1. The Draft EIR/EIS or Supplement did not identify that there would be significant impacts to the neighboring agricultural operations. A buffer of one mile exists between the land holdings of CLC and the proposed action.

Response 094-19

1. To respond to this comment, a report has been prepared addressing the potential for disease vectors to be attracted to agricultural crops in the vicinity of the proposed landfill. The report, *Agricultural Impact Report - The Potential Impact on Local Agriculture From the Proposed Rail•Cycle Bolo Station Landfill,* was prepared by Edwin Barnes, Ph.D., and summarizes experiences reported by researchers at Cal Poly (Barnes, 1993). The report addresses the potential for insect/nuisance vectors to be introduced into agricultural zones and references the following agricultural operations conducted in proximity to currently operating landfills:

   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter milt to one mile of the 2,800 ton per day County of Los Angeles Spadra Landfill.

- Privately owned and operated orchards situated in proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

2. The following discussion highlights the findings of the above report:

   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported health or safety impacts.
   - Negative effects, attributable to landfill operations on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Unpaved internal roads within the Cal Poly campus farm are responsible for more fugitive dust-related impacts on agricultural operations than fugitive dust emitted from the Spadra Landfill.
   - Citrus trees located 3/10 of a mile from the Highgrove Landfill do not exhibit more dust or dirt than trees one mile away and in the middle of the orchards.
   - The Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

3. The following mitigation measures are recommended in the report to minimize potential agricultural impacts:

   - Implementation of fugitive dust control measures, including watering, use of dust abatement products, construction of berms, speed limit controls, and curtailing operations during occasional high winds. This mitigation measure is already included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Installation of a pole and wire system or some other effective alternative for control of birds. This mitigation measure is already included in the EIR/EIS for the proposed Bolo Station Landfill.
   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

4. Based on the above findings and mitigation measures, the marketability of CLC produce is not expected to be affected by development and operation of the proposed landfill.

Response 094-20

1. See Response 094-18.

Response 094-21

1. The County General Plan does not indicate that landfills are incompatible with agricultural uses. The County General Plan contains policies designed to protect prime agricultural lands from encroachment by urban uses, but has no specific policies regarding non-prime agricultural lands such as CLC site and landfills. While it is acknowledged that CLC considers its lands to be unique, the County General Plan does not designate these lands as prime agricultural lands. Nevertheless, the County General Plan's policies are designed to assure environmentally safe landfill development, which protects natural resources, and would indicate that, with implementation of required protective measures, landfills and agricultural lands are not incompatible uses. Furthermore, the environmental analysis conducted in this EIR/EIS does not identify significant impacts to surrounding land uses, or effects of the proposed landfill which would adversely affect CLC's agricultural operations.

Response 094-22

1. See Responses 094-19 and 094-21.

Response 094-23

1. See Responses 094-11.

Response 094-24

1. As specified in the Supplement, drainage structures at the proposed site, including those related to runoff from closed landfill areas, will be designed to handle 100-year, 24-hour storm events without appreciable erosion. Section 3.3.2.1.2 of the Draft EIR/EIS described the controls which would be implemented to control stormwater runoff within the landfill limits for active working areas, completed cells, and areas to be developed. Stormwater run-on would be diverted from the active cells by temporary diversion ditches that would be constructed around the perimeter of each

individual cell or working area. The water would be diverted from the active cell and collected in a temporary run-on retention pond. Stormwater runoff from within the active working area would also be collected and diverted to an unlined temporary runoff retention pond.

2. Maintenance throughout the active life and postclosure period will assure the integrity of drainage structures and other landfill features.

Response 094-25

1. See Response 094-18.

Response 094-26

1. As discussed in Chapter 2.0 of the Supplement, recycling rates in Los Angeles County are presently about 18 percent and programs are in place to increase this amount. State law requires that cities and counties divert 25 and 50 percent of their waste stream by 1995 and 2000, respectively. Based on the success of their current programs, Los Angeles County anticipates meeting AB 939's diversion requirements. For more information on solid waste management practices in Los Angeles County, see Chapter 2.0 of the Supplement.

Response 094-27

1. See Response 094-26.

Response 094-28

1. Even with compliance with AB 939's source reduction and recycling requirements, cities and counties in southern California will still require substantial additional landfill capacity. For more information on state-mandated solid waste management practices and, in particular, those in Los Angeles County, see Chapter 2.0 of the Supplement.

Response 094-29

1. See Response 094-28.

Response 094-30

1. As discussed in Section 4.9 of the Draft EIR/EIS, the portion of Route 66 (National Trails Highway) in the vicinity of the proposed landfill is not designated as a scenic highway by the County or state. The closest portion of Route 66 that has been designated as scenic is the section of the highway between Ore Grande and Lenwood, approximately 85 miles north northwest of the proposed site. In addition, there are no designated scenic areas in the area surrounding the proposed Bolo Station site. The closest designated scenic area to the proposed site is the portion of I-40 between Ludlow and Needles that at its closest is 12 miles north of the proposed site. The proposed action would not result in the lose of scenic designation in the area.

Response 094-31

1. The use of land at the Twentynine Palms U.S. Marine Corps Base is not considered to be a reasonable and feasible alternative to the proposed site due to the jurisdictional issues associated with the use of military lands.

Response 094-32

1. The BLM has a standard list of approximately 600 agencies, elected officials, groups, individuals, and electronic and print news media that are notified regarding the availability of documents, such as the Draft EIR/EIS for Rail•Cycle, and regarding public meetings, such as the three public hearings held on the Draft EIR/EIS. In addition, the County provided the Notice of Availability of the Draft EIR/EIS to various newspaper in the region including the following:

   - Desert Dispatch
   - Desert Sun
   - Desert Trail
   - Hi-Desert Star
   - Inland Valley Daily Bulletin
   - Los Angeles Times
   - The Sun
   - Riverside Press-Enterprise
   - Victorville Daily Press

2. The Notice of Availability which was also found in the Draft EIR/EIS, included the place, date and time for the three BLM public hearings on the Draft EIR/EIS.

3. The distribution process for the Draft EIR/EIS and the announcement process for the public hearings met the requirements of CEQA and NEPA. While a reasonable effort was made by the County and BLM to notify the public about the availability of the Draft EIR/EIS and the public meetings, it is not possible to assure that each interested individual is notified.

PUBLIC HEARING IN RE:)
)
RAIL CYCLE PROJECT)
______________________________)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

LOCATION: SAN BERNARDINO COUNTY
GOVERNMENT CENTER
385 NORTH ARROWHEAD AVENUE
HEARING CHAMBERS
SAN BERNARDINO, CA

DATE AND TIME: THURSDAY, FEBRUARY 11, 1993
7:00 TO 8:05 P.M.

REPORTED BY:

DIANE L. MARTIN, C.S.R., R.P.R., C.M.

(NO. 8268)

JOB NO. 21848DLM

PRESENT

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BY: TIM READ, HEARING OFFICER
150 COOLWATER LANE
BARSTOW, CALIFORNIA 92311
(619) 256-2729

SPEAKERS:

SYLVESTER BROOKS, PAGE 5
RAY KIRKHAM, PAGE 11
FRANK GIESING, PAGE 15
LOUISE FRENCH, PAGE 17
ROBERT REYES, PAGE 21
JEFF WRIGHT, PAGE 22
TED DUTTON, PAGE 24
JOHN STEVENS, PAGE 26
D. J. MASKER, PAGE 27
DELBERT MILLER, PAGE 29
DON RUSK, PAGE 30
RANDY SCOTT, PAGE 33
KEVIN BARNES, PAGE 34

SAN BERNARDINO, CA THURSDAY, FEBRUARY 11, 1993

PROCEEDINGS

-000-

MR. READ: MY NAME IS TIM READ. I AM ACTING AS A HEARING OFFICER FOR THE CALIFORNIA DESERT DISTRICT.

THERE HAS BEEN PUBLISHED NOTICES OF THIS HEARING AND OTHER HEARINGS THAT ARE BEING HELD WITH RESPECT TO THE SUBJECT TONIGHT.

I WOULD LIKE TO READ INTO THE RECORD THE PURPOSE OF THIS MEETING AND WHAT WE WILL BE DOING HERE TONIGHT.

A JOINT DRAFT ENVIRONMENTAL IMPACT STATEMENT AND ENVIRONMENTAL IMPACT REPORT HAS BEEN PREPARED BY THE BUREAU OF LAND MANAGEMENT AND THE COUNTY OF SAN BERNARDINO PLANNING DEPARTMENT FOR A PROPOSED SOLID WASTE LANDFILL NEAR AMBOY. THE PROJECT IS TERMED THE RAIL CYCLE - BOLO STATION LANDFILL.

THE SOLID WASTE WILL BE SORTED AT MATERIAL RECOVERY FACILITIES LOCATED IN VARIOUS SOUTHERN CALIFORNIA CITIES AND COUNTIES. THE MATERIAL WILL THEN BE PACKED INTO CONTAINERS AND PLACED ON TRAINS. THE PROPOSED SITE IS 4500

ACRES, OF WHICH 2100 ACRES WOULD BE UTILIZED FOR THE LANDFILL. THE LANDFILL WOULD BE OPEN 60 TO 100 YEARS. THE FEDERAL ACTION IS THE EXCHANGE OF 2 1/2 SECTIONS AND ISSUANCE OF AN ACCESS RIGHT-OF-WAY. THREE ALTERNATIVES WERE EXAMINED: A SITE AT CADIZ VALLEY; A REDUCED SIZE ALTERNATIVE; AND NO ACTION.

THE DRAFT EIR/EIS EXAMINES IMPACTS AT THE PROPOSED SITE AND FOR THE ALTERNATIVE. IMPACTS EXAMINED WERE TRANSPORTATION, WILDLIFE, AIR QUALITY, GROUNDWATER, AND VISUAL, AMONG OTHERS.

THE PURPOSE OF THIS MEETING IS TO OBTAIN COMMENTS ON THE DRAFT EIS/EIR. ALL COMMENTS WILL BE RECORDED VERBATIM WHILE WE ARE IN SESSION BY THE REPORTER. THESE COMMENTS AS WELL AS THE WRITTEN COMMENTS WILL HAVE A WRITTEN RESPONSE IN THE FINAL EIS/EIR.

ADDITIONAL HEARINGS WERE HELD IN 29 PALMS ON THE 10TH, AND TONIGHT'S HEARING, AS WELL AS ONE IN BARSTOW ON THE 9TH. ALL MEETINGS WERE FROM 7:00 TO 9:00 P.M.

WRITTEN COMMENTS BESIDES THOSE SUBMITTED HERE WILL BE ACCEPTED UNTIL MARCH 3RD, 1993. COMMENTS ARE TO BE MAILED TO PLANNING DEPARTMENT, SAN BERNARDINO COUNTY, 385 NORTH ARROWHEAD AVENUE, THIRD FLOOR, SAN BERNARDINO, CALIFORNIA, 92415, ATTENTION: MR. RANDY SCOTT.

I WILL FIRST CALL THOSE PERSONS WHO INDICATED THAT THEY WISHED TO MAKE A COMMENT, AND THEN I WILL ASK IF ANYONE ELSE WISHES TO MAKE A COMMENT.

WE WILL BEGIN WITH SYLVESTER BROOKS. WOULD YOU PLEASE SPELL YOUR NAME FOR THE RECORDER WHEN YOU GET TO THE PODIUM.

MR. BROOKS: MY NAME IS SYLVESTER BROOKS, S Y L V E S T E R B R O O K S.

I AM VERY MUCH INTERESTED IN THIS PROJECT. I HAVE BEEN FOLLOWING IT FOR THREE YEARS. I RESIDE IN THE CITY OF ONTARIO.

I WOULD LIKE TO GET A FEW QUESTIONS ANSWERED, IF I MAY. THE SITE THAT YOU PROPOSED, IS THAT THE OLD KAISER PLACE?

MR. READ: I AM SORRY. WE ARE REALLY NOT ANSWERING QUESTIONS TONIGHT. WE ARE JUST TAKING COMMENTS BASED ON THE ENVIRONMENTAL IMPACT STATEMENT AND THE ENVIRONMENTAL IMPACT REPORT. ①

MR. BROOKS: WELL, THAT WOULD HAVE A LOT TO DO WITH THE ENVIRONMENT, THE IMPACT ON THE ENVIRONMENT IF YOU ARE USING THE OLD KAISER SITE. FORMERLY, THAT'S WHAT THEY WERE TALKING ABOUT, IS

THE OLD KAISER SITE.

ONE THING I WOULD LIKE TO EXPLAIN TO YOU, IF YOU ARE USING THE OLD KAISER SITE, LAW PROHIBITS THAT. UNLESS YOU CHANGE THE LAW, YOU CANNOT USE THAT PARTICULAR SITE. ① CONT.

ANOTHER THING, I WOULD LIKE TO KNOW WHAT THE COMMISSION IS DOING TO CONTROL LEACHING. THAT'S VERY MUCH A PROBLEM. ②

ALL RIGHT. NOW, YOU HAVE TO GO TO TRANSFER STATIONS, WHICH IS GOING TO TAKE A LOT OF TIME AND A LOT OF MONEY. ③

ANOTHER THING, WE ARE GOING TO HAVE RELAY STATIONS THAT HAVE HAZARDOUS WASTE STATIONS. AND PERSONALLY I CHECKED THIS SYSTEM OUT. AND TO ME, I THINK IT WOULD BE TOO EXPENSIVE FOR THE AVERAGE PERSON, ESPECIALLY SENIORS, WHICH -- I HAVE BEEN ARGUING WITH THE CITY OF ONTARIO. WE RECENTLY HAD A RAISE OF 40 PERCENT ON OUR TRASH, NOT COUNTING THE 50 PERCENT ON OUR SEWAGE. NOW, A LOT OF SENIOR CITIZENS CANNOT AFFORD THE RAISE. AND I KNOW THIS TRAIN HAUL, THE WAY I FIGURE IT, WILL COST AT LEAST FROM 12 TO $15 A MONTH MORE. AND THERE ARE A LOT OF SENIOR CITIZENS NOT ONLY IN ONTARIO, BUT OTHER CITIES, THAT ARE NOT GOING TO BE ABLE TO AFFORD THAT AMOUNT OF MONEY. ④

NOW, I WISH THE CITIZENS WOULD CONSIDER IT AND GET A PLAN ABOUT HOW MUCH IT'S GOING TO COST. WE DON'T WANT ANY IF'S, AND'S AND BUT'S. WE WANT THE EXACT AMOUNT OF WHAT IT'S GOING TO COST. ④ CONT.

NOW, I'VE DEALT WITH SOME OF THESE ORGANIZATIONS THAT ARE GOING TO CONTROL THIS, AND SOME OF THEM ARE NOT TOO RELIABLE, SO FAR AS I'M CONCERNED.

ANOTHER THING, I'VE CHECKED ALL OVER THE UNITED STATES SINCE I'VE BEEN WORKING WITH THIS PARTICULAR PROJECT WITH THE CITY OF ONTARIO -- FOR -- NOT FOR THE CITY OF ONTARIO, BUT AS A PRIVATE CITIZEN. NOW, THERE IS A NEW SYSTEM THAT HAS COME OUT THAT'S CALLED A PYROLYSIS SYSTEM. I DON'T KNOW WHETHER YOU'VE LOOKED INTO IT OR ANYBODY ELSE HAS LOOKED INTO IT, BUT IT DESERVES LOOKING INTO. IT'S BEING INSTITUTED BY GEORGIA TECH. THEY CAN TAKE 100 TONS OF ASBESTOS AND TAKE IT DOWN TO ONE TON AND STILL USE THE BYPRODUCT. ⑤

NOW, RAIL HAUL IS ALL RIGHT, BUT WE ARE GOING TO HAVE TO FIND AN ALTERNATIVE METHOD, BECAUSE AS TIME GOES ON WE ARE GOING TO NEED MORE AND MORE PLACES TO DUMP THIS STUFF. AND HAZARDOUS WASTE IS A VERY IMPORTANT THING. ⑥

ANOTHER THING ABOUT THIS PARTICULAR SYSTEM, YOU CAN HAVE A PORTABLE UNIT. YOU CAN TAKE IT TO THE ASBESTOS PLACE OR YOU CAN TAKE IT TO THE HOSPITALS AND GET RID OF EVERYTHING. AND IT DOES NOT -- IT'S NOT LIKE A BURNER INFILTRATION PLANT. IT HAS NO -- NO BAD PROPERTIES FOR THE ENVIRONMENT. ⑦

AND BEFORE THIS COUNTY OF SAN BERNARDINO GOES WITH THIS EXPENSIVE RAIL HAUL DEAL, I WISH YOU WOULD CHECK AND LOOK INTO IT. I HAVE ALL THE INFORMATION, IF ANYONE IS INTERESTED. I HAVE ALL THE INFORMATION RIGHT HERE ON THAT PARTICULAR SYSTEM.

NOW, JAPAN IS STARTING TO DO THE SAME THING. WHAT ARE WE GOING TO DO? WAIT TO BUY IT FROM JAPAN? THAT'S WHAT WE HAVE THESE PEOPLE HERE FOR, TO LOOK OUT FOR US. AND I THINK THE RAIL HAUL WILL BE VERY, VERY MUCH, MUCH TOO EXPENSIVE FOR THE AVERAGE RETIRED PERSON. I AM RETIRED, AND I LOOK OUT FOR EVERYBODY ELSE THAT IS RETIRED, AND I WISH YOU WOULD RECONSIDER IT AND FIND ANOTHER WAY.

NOW, I -- I WENT UP TO THIS M.R.F. -- THEY HAVE A M.R.F. STATION IN ANAHEIM. IT'S NOT WORTH TWO DEAD FLIES. NOW -- IT'S TOO MUCH BULK. ⑧

THEY STILL HAVE TO HAUL IT AFTER THEY'RE FINISHED WITH IT. THEY CANNOT HANDLE THE HAZARDOUS WASTE. AND IT'S NOT WORTH A DIME. I'M TELLING YOU THE TRUTH. I WISH SOME OF YOU WOULD GO DOWN AND SEE THAT PLANT. THEN YOU HAVE TWO -- A PIT WITH TWO GREAT BIG BULLDOZERS IN THERE JUST PUSHING THIS STUFF, AND ALL THIS IS DOING IS BULKING IT UP.

⑧ CONT.

AND IF YOU LOOK INTO THIS NEW SYSTEM, WE WON'T HAVE -- WE CAN GET RID OF EVERYTHING FROM THE HOSPITAL, WE WON'T HAVE THE TRUCK TRAFFIC OR ANYTHING LIKE THAT.

NOW, IN ONTARIO, WE ARE GOING TO HAVE A HECK OF A PROBLEM WITH TRUCK TRAFFIC. AND IF WE GO THIS SYSTEM, THE MILLIKEN LANDFILL, WE CAN EVEN TAKE THE STUFF OUT OF THERE AND USE THAT AND GET RID OF THAT. BECAUSE EVENTUALLY AS TIME GOES ON, I WON'T SEE IT, MAYBE YOU WON'T SEE IT, BUT WITHIN MAYBE THE NEXT 100 YEARS WE ARE GOING TO HAVE A REAL PROBLEM. AND I SINCERELY WISH THAT THE COUNCIL OR WHOEVER IS CONSIDERING THIS PARTICULAR THING WOULD LOOK AT THIS ALTERNATIVE OBJECT OF TRYING TO DO THIS PARTICULAR JOB. BECAUSE I DON'T THINK RAIL HAUL WILL DO IT. RAIL HAUL IS GOING TO RUN INTO MORE AND MORE AND MORE AND MORE MONEY. AND WE DO NOT HAVE THE MONEY TO SPARE. THANK

YOU.

MR. READ: THANK YOU, MR. BROOKS. DID YOU HAVE SOMETHING YOU WANTED TO SUBMIT, SOME WRITTEN MATERIAL?

MR. BROOKS: YES, I DO.

MR. READ: YOU CAN EITHER GIVE IT TO THE RECORDER OR TO ME.

MR. BROOKS: WELL, IF I MIGHT GET IT BACK WHEN YOU'RE THROUGH WITH IT, PLEASE.

MR. READ: THIS WOULD BE FOR ENTERING INTO OUR RECORD.

MR. BROOKS: WELL, IT'S ABOUT 250 PAGES. WHAT THIS IS IS A --

MR. READ: STEP TO THE MICROPHONE.

MR. BROOKS: I BEG YOUR PARDON?

MR. READ: PLEASE STEP TO THE MICROPHONE.

MR. BROOKS: NOW, THIS SYSTEM WAS DEVELOPED BY DR. LOU CIRCEO IN GEORGIA INSTITUTE OF TECHNOLOGY. IT'S A VERY GOOD IDEA. AND AS I SAID, THE JAPANESE ARE STARTING TO DO THE SAME THING. WHAT THEY HAVE DONE OUT OF THE BYPRODUCT IS MAKE FOUNTAINS AND THINGS LIKES THAT. WE CAN USE THE BYPRODUCT OUT OF THIS TO PUT IT ON THE ROADS, IF WE WANTED TO. OR WE CAN MAKE OBJECTS

OUT OF IT. AND THAT'S WHAT WE NEED TO LOOK TO.

WE CAN MAKE CHEMICALS, BUT WHY CAN'T WE DESTROY THEM? SO THIS WAY, WE CAN DESTROY THEM. THERE WILL BE NOTHING LEFT, NO BYPRODUCT, NO HAZARDOUS WASTE OR ANYTHING. AND THIS HERE IS ABOUT A HUNDRED AND -- OH, I'D SAY IT'S LEAST A 150-PAGE DOCUMENT. YOU CAN LOOK IT OVER. AND WHENEVER YOU -- JUST PLEASE RETURN IT. MY ADDRESS IS ON HERE. AND JUST PLEASE RETURN IT TO ME. THAT'S ALL I ASK.

MR. READ: OKAY. THANK YOU.

MR. BROOKS: THANK YOU.

MR. READ: RAY KIRKHAM?

MR. KIRKHAM: MY NAME IS RAY KIRKHAM AND --

MR. READ: PLEASE SPELL IT. WOULD YOU --

MR. KIRKHAM: THAT'S WHAT I WAS GOING TO DO FOR YOU.

MR. READ: I'M SORRY.

MR. KIRKHAM: THAT'S R A Y KIRKHAM. THAT'S K I R K H A M. AND I'M FROM 29 PALMS.

ON MAY 12TH, 1989, RIGHT HERE IN SAN BERNARDINO, WE HAD A TRAIN WRECK IN WHICH 4 PEOPLE DIED AND 11 PEOPLE WERE INJURED. ⑨

APPROXIMATELY 13 DAYS LATER, BECAUSE OF A PROBLEM WITH THE REPAIR ON A GAS PIPELINE THAT RAN PARALLEL TO THE RAIL LINE, WHICH HAD BEEN IMPACTED BY THE TRAIN IN THE WRECK, THAT PIPELINE BLEW OUT AND THERE WAS AN EXPLOSION, AND 3 MORE PEOPLE DIED AND 31 MORE PEOPLE WERE INJURED. ⑨ CONT.

AND I MENTION THIS BECAUSE OF THE FACT THAT THIS IS THE KIND OF THING THAT YOU GET WHEN YOU OVERTAX A TRANSPORTATION SYSTEM, A PARTICULAR CORRIDOR WHICH LEADS TO THIS RAIL CYCLE PROJECT. IN FACT, IT UTILIZES THOSE VERY TRACKS.

SO WHEN WE LOOK AT HOW THE EIR HAS HANDLED THE CUMULATIVE IMPACTS OF THIS PROJECT, THEY DON'T APPEAR TO HAVE PAID ANY ATTENTION TO THE DANGERS IN SAN BERNARDINO.

I THINK THE OTHER THING IS THAT, WHILE THEY MENTION THE CUMULATIVE IMPACTS IN THE DESERT AREA, IN THE VICINITY OF THEIR PROJECT, WHAT WAS NOT CONSIDERED IS THE CUMULATIVE IMPACTS ALONG THE RAIL ROUTES, PARTICULARLY HERE IN SAN BERNARDINO WHEN IT COMES TO THE FACT THAT WE HAVE TWO HAZARDOUS MATERIAL SITES THAT WILL BE ON THAT SAME LINE. U.S. ECOLOGY WANTS A NUCLEAR DUMP FACILITY OUT BY NEEDLES. AND THEN THERE'S THIS GARBAGE PROPOSITION FROM RAIL CYCLE. ⑩

THE FACT IS, YOU ADD THAT UP, THAT'S AN AWFUL LOT OF BAD NEWS GOING THROUGH SAN BERNARDINO EVERY DAY. THAT'S AN AWFUL LOT OF RISK FOR THE CITY OF SAN BERNARDINO. AND THAT RISK, BY THE WAY, ISN'T JUST IN SAN BERNARDINO. IT GOES UP THE HILL. IT GOES RIGHT THROUGH VICTORVILLE AND TOWNS DOWNSTREAM OF THERE. THERE ARE A NUMBER OF THEM. RIGHT THROUGH BARSTOW. I WAS IN BARSTOW. I SAW WHAT A PRETTY LITTLE TOWN BARSTOW WAS. AND ALL IS WELL UNTIL YOU HAVE YOUR FIRST ACCIDENT. ALL IS WELL UNTIL YOU HAVE YOUR FIRST EQUIPMENT FAILURE. AND THEN ALL IS NOT SO WELL.

⑪ THIS PARTICULAR RAIL LINE THAT WANTS TO LEAD TO THE FINAL REPOSITORY OF MOST OF SOUTHERN CALIFORNIA'S GARBAGE HAPPENS TO ALSO CROSS THE SAN ANDREAS FAULT. SHOULD THIS SYSTEM BE INTERRUPTED AND SHOULD ALL OF MANY COMMUNITIES' EGGS BE PLACED IN ONE BASKET, WHICH IS -- IN OTHER WORDS, ONCE RAIL CYCLE GETS GOING, IT INTENDS TO CONTRACT WITH PEOPLE, PUT OTHER PEOPLE OUT OF BUSINESS. AND ONCE YOU ARE COMMITTED TO THAT METHOD OF DISPOSAL AND THAT LINE, THAT VERY NARROW LINE IS INTERCEPTED WITH A MAJOR EVENT LIKE AN EARTHQUAKE -- I BELIEVE THAT THE -- THAT SHOULD HAVE BEEN COUNTED AS A RISK IN THIS PROJECT. IT

⑪ CONT.

WASN'T EVEN CONSIDERED. THEY TALKED ABOUT THE SEISMIC ACTIVITY IN THE VICINITY OF THE SITE IN THE EIR. THE SITE DOESN'T HAPPEN TO BE EXTREMELY ACTIVE, BUT THAT DOESN'T MEAN THAT THERE IS NO ACTIVITY THERE. ON THE OTHER HAND, THE SEISMIC ACTIVITY ON THE ROUTE ITSELF, THE ROUTE -- THE TRAIN ROUTE WHERE ALL OF THESE THINGS ARE GOING TO BE FLYING THEIR WAY ALONG TO THEIR SEVERAL FINAL RESTING PLACES, IF YOU BELIEVE THAT, IT'S EXTREMELY SEISMICALLY ACTIVE. AND IT HAS BEEN INCREASINGLY SEISMICALLY ACTIVE.

THIS DOESN'T SEEM LIKE THE KIND OF WAY TO DEAL WITH THE PROBLEM, TO JUMP IN WITH BOTH FEET AND COMMIT EVERYTHING TO A VERY RISKY PROPOSITION. THAT IS ONE ITEM THAT I WANTED TO ADDRESS.

⑫ THERE'S ANOTHER ITEM THAT'S JUST EQUALLY AS IMPORTANT AND HAS TO DO WITH ECONOMIC DESPERATION. AS I HAVE REVIEWED THIS DRAFT EIR AND HAVE REVIEWED OTHER DRAFT EIR'S AND FINAL EIR'S ON DESERT DUMPS, ONE OF THE THINGS THAT IMPRESSES ME OVER AND OVER AGAIN IS THAT WOULD ANYONE IN THEIR RIGHT MIND IMAGINE AN IMPORTATION SCHEME TO LOS ANGELES COUNTY FROM ALL OF THE OTHER COUNTIES? WOULD ANYONE IMAGINE AN IMPORTATION

⑫ CONT.

SCHEME TO ORANGE COUNTY, A MAJOR ONE, WHERE YOU'D ASK ORANGE COUNTY TO ACCEPT ALL OF THE GARBAGE OF SOUTHERN CALIFORNIA? AND I THINK THE ANSWER IS ABSOLUTELY NOT.

⑬

SAN BERNARDINO COUNTY IS NOT AN EXTREMELY GOOD PLACE TO GO LOOKING FOR WORK. THAT'S A FACT. BUT I THINK THAT WE MAKE A MISTAKE IN INVITING IN THE POOREST TYPE OF OPERATIONS AND SAYING, "MAKE YOUR HOME HERE. WE HAVE DESPERATE PEOPLE YOU CAN HIRE." IT GIVES THE COUNTY A BAD NAME. AND I THINK IT DRIVES AWAY THE HIGHER QUALITY TYPES OF DEVELOPMENT THAT THIS COUNTY CERTAINLY ATTRACTS WITHOUT THIS PROJECT.

THAT'S REALLY ABOUT THE SUM TOTAL OF WHAT I HAVE TO SAY HERE TONIGHT. I DID HAVE ONE OTHER LITTLE REMARK, AND THAT IS THAT ANYONE THAT WANTS TO SIGN A PETITION CAN SEE ME AFTER THIS THING. THANK YOU.

MR. READ: THANK YOU. FRANK GIESING?

MR. GIESING: MY NAME IS FRANK GIESING, G I E S I N G. I LIVE IN JOSHUA TREE.

WE COVERED A NUMBER OF THINGS IN THE TWO MEETINGS PRIOR TO THIS. AND I DON'T WANT TO DUPLICATE, BUT I FINALLY GOT AHOLD OF SOMETHING THAT I'VE BEEN WAITING FOR, AND THAT'S THE

SAN DIEGO DISTRICT ATTORNEY EDWIN L. MILLER, JR., OF SAN DIEGO'S REPORT OF MARCH 1992 ON THIS CORPORATION. THIS REPORT IS CONTAINED IN 58 PAGES. IT CALLS ON A NUMBER OF VIOLATIONS REGARDING ANTI-TRUST AND ENVIRONMENTAL REGULATIONS.

⑭

NOW, I DON'T WANT TO BEAT THIS THING TO DEATH, BUT I CAN SUM IT UP PRETTY WELL WITH -- ON PAGE 34 OF THIS DOCUMENT, QUOTE, "DURING 1990, MID-AMERICAN WASTE SUED WASTE MANAGEMENT, INC., IN JACKSONVILLE, FLORIDA, UNDER FLORIDA'S NEW 'BAD BOY LAW' TO ENJOIN WASTE MANAGEMENT FROM BEING GRANTED A $34 MILLION CITY DISPOSAL CONTRACT SINCE THEY FALL WITHIN THE JURISDICTION OF THE 'BAD BOY' LEGISLATION. THE LESIGLATION FORBIDS GOVERNMENT ENTITIES IN FLORIDA FROM DOING BUSINESS WITH COMPANIES WHICH HAVE BEEN CONVICTED OF FELONIES," UNQUOTE.

IT WOULD BE, IT SEEMS TO ME, MOST IMPORTANT FOR THE DISTRICT ATTORNEY OF SAN BERNARDINO AND COUNTY COUNSEL AND POSSIBLY ALONG WITH THE ATTORNEY GENERAL OF CALIFORNIA AND ADVISE ALL THE DECISION-MAKING BODIES ON THIS MATTER TO DROP THIS PROJECT BY RAIL CYCLE. THANK YOU VERY MUCH.

MR. READ: THANK YOU. LOUISE FRENCH?

MS. FRENCH: I AM LOUISE FRENCH, LOUISE FRENCH. I DO REPRESENT THE SAN GORGONIO CHAPTER OF THE SIERRA CLUB TONIGHT AS A SOLID WASTE COMMITTEE CO-CHAIR. AND THESE ARE MY COMMENTS FOR THE HEARING TONIGHT. THEY REPRESENT ONLY A FEW OF THE MANY CONCERNS THE SIERRA CLUB HAS CONCERNING THIS PROJECT, AND WE ARE GOING TO PROVIDE EXTENSIVE WRITTEN COMMENTARY IN ADDITION TO THIS. WE HAVE OTHER PEOPLE WHO COMMENTED AT THE OTHER HEARINGS.

⑮ THIS DEIS/EIR IS INADEQUATE IN ESTABLISHING THE NEED FOR THIS PARTICULAR PROJECT. ⑯ IT DOES NOT ADDRESS THE CONSEQUENCES OF THE, QUOTE, "NO-ACTION ALTERNATIVE," UNQUOTE, AS COMPARED TO THE CONSEQUENCES OF THE ADDRESSED ALTERNATIVES. ⑰ IT DOES NOT CONSIDER THE DETAILS OF OTHER LANDFILL POSSIBILITIES WITHIN THE SOUTHERN CALIFORNIA REGION OR THE EFFECTS OF REQUIRED RECYCLING WHICH CAN REDUCE BY 50 PERCENT THE NEED FOR FUTURE LANDFILLS. ⑱ IT DOES NOT SHOW THAT THIS DUMP IS SIGNIFICANTLY BETTER THAN, QUOTE, "NO ACTION," UNQUOTE.

⑲ OPEN SPACE: ONE OF THE BIGGEST INFLUENCES THAT CANNOT BE MITIGATED IS A LOSS OF OPEN SPACE. ⑲ CONT. TWO THOUSAND ONE HUNDRED ACRES OF OPEN SPACE ARE TO BE TURNED INTO AN 800-FOOT-HIGH MOUNTAIN OF TRASH WITH 2,700 ACRES AFFECTED BY SUPPORT FACILITIES. THIS IS CONTRARY TO BOTH THE CURRENT B.L.M. MANAGEMENT PLAN AND THE COUNTY'S OPEN SPACE DESIGNATION WHICH COVERS THIS AREA. ⑳ THE COUNTY DEVELOPMENT CODE REQUIRES A PROJECT MEET AT LEAST ONE CRITERIA TO BE CONSIDERED FOR DEVELOPMENT. WHILE IT MAY MEET THE FIRST ONE, QUOTE, "REQUIRES A REMOTE LOCATION," UNQUOTE, IT FAILS TO MEET A SECOND ONE, QUOTE, "THE LAND USE IS DEEMED ESSENTIAL OR DESIRABLE TO PUBLIC CONVENIENCE OR WELFARE," UNQUOTE. BY FAILING TO ADDRESS THE NO-ACTION ALTERNATIVE, IT CANNOT PROVE TO BE ESSENTIAL AND IT IS CERTAINLY NOT DESIRABLE.

㉑ IT ALSO FAILS TO MEET THE MANAGEMENT GOALS FOR THE SAN BERNARDINO COUNTY GENERAL PLAN, WHICH ARE LISTED ON PAGE 4-14-1. NO. 1 STATES, QUOTE, "MAXIMUM PRESERVATION OF OPEN SPACE, WATERSHED, AND WILDLIFE HABITAT AREAS," UNQUOTE. COUNTY GENERAL PLAN ACKNOWLEDGES THAT, QUOTE, "DESERT RESIDENTS OPPOSE THE USE OF THE DESERT AS A DUMPING GROUND FOR WASTE GENERATED ELSEWHERE," UNQUOTE.

CURRENT B.L.M. LANDS ARE CLASS "L" AND "M," WHICH ARE NOT CONSISTENT WITH A SOLID WASTE MANAGEMENT FACILITY. THE PROPOSED LAND EXCHANGE WILL ELIMINATE THE B.L.M.'S 2 1/2 SECTIONS OF LAND FROM OPEN SPACE. OVERALL, THIS IS AN OVERWHELMING LOSS OF OPEN SPACE AND MUST BE COMPENSATED FOR. ㉒ IF THIS PROPOSAL WERE FOR THE DEVELOPED VALLEY REGION OF THE COUNTY, THE PROJECT WOULD BE SMOTHERED BY OUTRAGED CITIZENS. ITS FOOTPRINT IS ROUGHLY ONE HALF THE SIZE OF THE CITY OF SAN BERNARDINO. WHAT'S THE MITIGATION FOR THIS HUGE LOSS OF OPEN SPACE? ㉓

WATER CONSUMPTION: WATER IS A PRECIOUS COMMODITY IN THE DESERT. THIS DEIS/DEIR ESTIMATES THAT THE TOTAL ANNUAL CONSUMPTION COULD BE 2,380 ACRE FEET PER YEAR -- SHOULD BE. PARDON ME -- BUT THE TOTAL ANNUAL CONSUMPTION MIGHT BE UP TO 7,880 ACRE FEET A YEAR IN THE AREA. NOW, BOLO'S ESTIMATED DRAW OF 67 TO 83 ACRE FEET WOULD RESULT IN AN OVERDROP. SURROUNDING NEIGHBORS WILL BE IMPACTED AS WELL AS WATER SOURCES FOR FLORA AND FAUNA. SUGGESTED MITIGATION IS DRILLING A NEW WELL. HOW WILL THAT HELP? GROUNDWATER WITHDRAWAL HAS LED TO NOTED GROUND SUBSIDENCE. WHAT WAS THE MITIGATION FOR THIS? ㉔

NOISE: THE NOISE LEVEL IS STATED TO BE UNDER ACCEPTABLE LEVELS AND WORKERS WILL HAVE PROPER SAFEGUARDS. HOWEVER, THIS FACILITY WILL OPERATE 24 HOURS PER DAY. ANY NOISE WILL IMPACT THE QUIET OF THE DESERT NIGHT. WILDLIFE WILL BE AFFECTED, NOT TO MENTION THE RECREATIONAL DESERT USER LOOKING FOR PEACE AND SOLITUDE. DESERT RESIDENTS GENERALLY STATE THEY LIVE IN THE DESERT TO AVOID SUCH IMPACTS. WHAT MITIGATION IS OFFERED? NONE. ㉕

VISUAL: AS STATED, THIS PROJECT WILL BE VISIBLE FOR 20 MILES FROM THE SOUTH AT SHEEPHOLE SUMMIT AND FROM MANY OTHER AREAS. MITIGATIONS TO CAP AND COVER INDIVIDUAL PITS ARE THE PITS. THE USE OF A ONE-FOOT CAP OF SOIL WILL DRASTICALLY CHANGE THE PLANTS WHICH REQUIRE EXTENSIVE ROOT SYSTEMS TO SURVIVE IN THIS LAND OF LITTLE RAIN. THERE MUST BE BETTER MITIGATION OR COMPENSATION FOR THIS LOSS OF VISUAL ATTRACTIVENESS. ㉖

ENERGY: THERE IS NO COMMITMENT TO UTILIZE THE ENERGY DEVELOPED IN THE LANDFILL, EVEN THOUGH THE POSSIBILITY IS RECOGNIZED, IF THIS IS APPROVED. IT IS A VALID ENERGY SOURCE AND SHOULD BE UTILIZED. ㉗

THERE ARE MANY OTHER ENVIRONMENTAL

IMPACTS LACKING SUFFICIENT MITIGATION IN ADDITION TO THE ONES MENTIONED. TRAINS ARE SCHEDULED TO RUN AT NIGHT WHEN DESERT WILDLIFE IS MOST ACTIVE. ㉘ HOW MUCH AIR POLLUTION WILL THIS PROJECT PRODUCE? ㉙ MANY, MANY QUESTIONS ARE UNANSWERED AND WILL BE THE SUBJECT OF WRITTEN COMMENTARY. BECAUSE OF THESE MULTIPLE MITIGATION PROBLEMS, THE SIERRA CLUB SEES A NEED FOR A CITIZENS ADVISORY TASK FORCE TO WORK ON MANY PROBLEMS PRESENTED. IT SHOULD BE MADE UP VARIOUS ENVIRONMENTAL GROUPS, INTERESTED CITIZENS, AND TO WORK WITH THE COUNTY AND WITH RAIL CYCLE. THANK YOU. ㉚

MR. READ: THANK YOU. ROBERT REYES?

MR. REYES: HI. I'M ROBERT REYES. THAT'S REYES. ROBERT, ROBERT.

I WORK FOR THE SAN BERNARDINO COUNTY FIRE AGENCY, AND THE PURPOSE OF MY BEING HERE TONIGHT IS TO TALK ABOUT FIRE PROTECTION. IT'S MY UNDERSTANDING THAT CSA-70M, WHICH IS OUR WONDER VALLEY FIRE DEPARTMENT, WHICH IS VOLUNTEER, IS IDENTIFIED AS THE PRIMARY FIRST-RESPONSE FIRE PROTECTION THING TO THE AMBOY SITE IN CASE OF FIRE AND FIRE NEEDS. ㉛

WE ARE NOT -- OUR BUDGET DOES NOT HAVE SUFFICIENT FUNDING FOR EQUIPMENT OR FOR ANY OF OUR ㉜

VOLUNTEERS FOR SUCH A TYPE OF LANDFILL. AND IF FUNDING CANNOT BE PROVIDED, WE REQUEST THAT OUR NAME BE TAKEN OUT OF THE DRAFT EIR AS A FIRST RESPONDER. BASICALLY, THAT'S IT. THANK YOU. ㉜ CONT.

MR. READ: OKAY. THANK YOU. JEFF WRIGHT?

MR. WRIGHT: HI. MY NAME IS JEFF WRIGHT, WRIGHT.

AND I'D LIKE TO SEE SOMETHING INCLUDED IN THE EIR/EIS THAT WOULD USE AS ALTERNATIVES MORE M.R.F.'S, SOURCE REDUCTION, AND LOCAL RECYCLING SO THIS STUFF NEVER EVEN HAS TO BE TRANSPORTED OUT OF WHERE IT'S BEING PROPOSED TO BE TRANSPORTED. THERE SHOULD BE A LOT MORE CONCENTRATION ON SOURCE REDUCTION AND RECYCLING THAN CYCLING IT THROUGH THE DESERT. ㉝

MITIGATION OF DERAILMENTS: I DIDN'T OBSERVE ANY OF THAT ADDRESSED. ㉞

SOMEONE ELSE BROUGHT UP EARTHQUAKES AS A POSSIBILITY. ㉟

RAIL FATIGUE. WE HAVE HIGH WINDS OUT HERE. THE TRAINS COULD BE BLOWN OFF, SINCE THEY -- IN CASES WHERE -- ESPECIALLY, LIKE, PAPERWORK TENDS TO -- YOU HAVE WINDS BLOWING ACROSS THE DESERT. YOU MAY HAVE VERY TOP-HEAVY ㊱

㊱ CONT. SITUATIONS. AND THAT SHOULD BE CONSIDERED.

㊲ SET UP THE TRANSPORTED PAPER TO BE RECYCLED, NOT JUST THROW IT IN A HOLE IN THE DESERT. THIS DOESN'T MAKE ANY SENSE WITH THE PROBLEMS THAT WE HAVE WITH THE LOSS OF RESOURCES, LOSS OF TREES IN NORTHERN CALIFORNIA, TO DO THINGS LIKE THIS, TO SET UP THE FUTURE FOR HAVING TO DIG THIS STUFF BACK UP OUT OF THE GROUND WHEN IT COULD BE REUSED AND RECYCLED.

㊳ AS FAR AS "WASTE MISMANAGEMENT" BEING CONSIDERED FOR RUNNING THIS, I THINK WITH THEIR PAST RECORD -- AS HAS ALSO BEEN ADDRESSED EARLIER -- THAT THIS SHOULD BE SERIOUSLY CONSIDERED WHEN WE HAVE FRAUD AND MISMANAGEMENT OF PREVIOUS SITES. HOW DO WE THINK THAT THESE PEOPLE ARE GOING TO SUDDENLY HAVE A HALO OVER THEIR HEAD AND BE GOOD GUYS DOWN THERE? THIS DESERT AND COUNTY ARE NOT A TOXIC TOILET OR TRASH BED FOR THE ㊴ REST OF SOUTHERN CALIFORNIA AND BEYOND, NOR ARE THEY APPROPRIATE SITES FOR LOW-LEVEL RADIOACTIVE WASTE. AND I WOULD ALSO LIKE TO BE PUT ON THE ㊵ LIST FOR THE HEARINGS FOR WHEN THAT COMES UP, AS HAS BEEN PROMISED BY THE GOVERNMENT. THANK YOU VERY MUCH.

MR. READ: THANK YOU. TED DUTTON?

2.6-154

MR. DUTTON: MY NAME IS TED DUTTON, DUTTON. I AM VICE PRESIDENT OF DEVELOPMENT FOR CADIZ DEVELOPMENT COMPANY. WE OWN APPROXIMATELY 26,000 ACRES, ALL OF THIS AREA IN HERE (INDICATING). THIS SITE OVER HERE IS RAIL CYCLE (INDICATING). OUR PROPERTY IS LARGER THAN MANY OF THE CITIES IN SOUTHERN CALIFORNIA. I HAVE BEEN A RESIDENT OF THIS COMMUNITY OF SAN BERN- -- AND SAN BERNARDINO COUNTY FOR APPROXIMATELY 25 YEARS, AND I HAVE BEEN ACTIVE IN THE COMMUNITY AND IN CIVIC AFFAIRS AND LAND DEVELOPMENT BUSINESS DURING THAT TIME.

I HAVE NEVER READ A DOCUMENT AS FLAWED AS THE RAIL CYCLE EIR/EIS. MANY OTHER SPEAKERS HAVE ADDRESSED NUMEROUS SHORTCOMINGS IN THIS DOCUMENT ALSO. A MEMBER OF THE SAN BERNARDINO COUNTY SOLID WASTE ADVISORY TASK FORCE AND A RECOGNIZED EXPERT IN THE SOLID WASTE BUSINESS, MR. PETER BURK, STATED IN A PUBLIC -- IN PUBLIC RECORD IN BARSTOW ON MONDAY NIGHT THAT THIS DOCUMENT IS MORE FLAWED THAN ANY OTHER HE'S PREVIOUSLY READ.

㊶ A CRITICAL CONCERN IS THE DOCUMENT'S FAILURE TO ADDRESS THE CUMULATIVE EFFORTS -- OR EFFECTS OF THE WASTE FACILITIES PROPOSED IN THE IMMEDIATE AREA. AND THESE INCLUDE THE VULCAN MINE

(41) CONT. HAZARD WASTE SITE, THE HIDDEN VALLEY HAZARD WASTE SITE, THE BROADWELL LAKE HAZARD WASTE SITE, THE RAIL CYCLE SOLID WASTE SITE, ADDING TO THAT, AND THE WARD VALLEY LOW-LEVEL RADIOACTIVE WASTE SITE.

WHAT THIS IS IS A WASTE CORRIDOR. TODAY, THIS AREA IS PRISTINE DESERT WITH AN ABUNDANCE OF HIGH-QUALITY GROUNDWATER SUPPLY. (42) CAN ANYONE CLAIM THAT THE CUMULATIVE AND ENVIRONMENTAL EFFECTS OF THESE PROPOSALS HAVE BEEN ADEQUATELY ADDRESSED? AND THE ANSWER IS THEY CERTAINLY ARE NOT, THEY HAVE NOT.

IN CONCLUSION, CADIZ DEVELOPMENT URGES THIS BODY NOT ACCEPT THE DRAFT EIR/EIS AS (43) ADEQUATE, AND TO DIRECT THE TRASH DUMP PROPONENTS TO, ONE, PROVIDE A MORE COMPREHENSIVE EVALUATION OF PRODUCT OF PROJECT ALTERNATIVES; TWO, TO (44) PROVIDE A BETTER ANALYSIS OF THE PROJECT'S EFFECTS ON THE EXISTING COMMERCIAL ENTERPRISES IN THE AREA, NAMELY, LESLIE SALT AND CADIZ AGRICULTURAL OPERATION; (45) THREE, PROVIDE A BETTER ANALYSIS OF THE CUMULATIVE EFFECTS OF THE NEIGHBORING WASTE FACILITIES NOW BEING CONSIDERED FOR APPROVAL.

(46) THIS EIR PLAYS LIP SERVICE TO ISSUES AND PRETENDS TO ADDRESS THE 9600 ACRES THAT WE ARE CONCERNED ABOUT IN OUR PROPOSED AGRICULTURAL

(46) CONT. AREA. CEQA OBLIGATES THIS DUMP SITE OPERATION TO IDENTIFY AND ADDRESS THE EFFECTS. JUST PLAIN AND SIMPLE, THE EIR IS INADEQUATE.

WE WILL BE PREPARING MORE DETAILED COMMENTS TO ADD TO THIS. THANK YOU.

MR. READ: THANK YOU. THAT IS THE LAST CARD THAT I HAD OF PEOPLE WHO HAD REGISTERED TO SPEAK. IS THERE ANYONE IN THE AUDIENCE WHO WOULD LIKE TO MAKE A COMMENT? IF SO, RAISE YOUR HAND. YES, SIR? AT THE PODIUM, PLEASE. STATE YOUR NAME AND SPELL IT FOR THE RECORD, PLEASE.

MR. STEVENS: OKAY. MY NAME IS JOHN STEVENS, S T E V E N S.

(47) THIS IS BASICALLY DEALING WITH THE BUREAU OF LAND MANAGEMENT AND DEALING WITH WHAT I'VE SEEN THE BUREAU DO WITH THE FOREST STUFF IN NORTHERN CALIFORNIA AND THE SO-CALLED ENVIRONMENTAL SACRIFICE ZONES, ESPECIALLY IN THE DESERT HERE.

THERE IS -- THERE HAS BEEN A CHANGE OF THE GUARD GOING FROM MANUEL LUHAN, WHO BASICALLY SOLD EVERYTHING HE COULD GET HIS HANDS ON, TO BRUCE BABBIT, WHO HOPEFULLY WILL DO SOMETHING A LITTLE BIT MORE RESPONSIVE TO WHAT'S GOING ON.

I DO NOT THINK THAT ANY GOVERNMENT AGENCY SHOULD BE SOLD OUT LOCK, STOCK AND BARREL FOR

OTHER PEOPLE TO PROFIT BY, ESPECIALLY WHEN THESE PEOPLE ARE SUPPOSED TO BE CARETAKERS OF WHAT'S GOING ON, AND THEY BECOME MERCHANTS. ㊼ CONT.

I HAVE SEEN WHOLE FORESTS SOLD OUT BY THE B.L.M. AND NOW I AM SEEING WHOLE ECOSYSTEMS BEING SOLD OUT BY THE B.L.M., ESPECIALLY WHEN MR. LUHAN TRIED TO SELL OUT WARD VALLEY WHILE EVEN -- EVEN AT THE TIME THAT THE NEW PRESIDENT WAS BEING SWORN IN, HE WAS TRYING TO GO BEHIND OUR BACKS. THIS MAN HAS ALSO BEEN RESPONSIBLE FOR PAYOFFS THAT HE IS NOW LOOKING AT PAYING OFF HIS EMPLOYEES AND SUCH.

AND MY CONCERN IS THAT WE ARE HERE AS UNITED STATES CITIZENS, AND I DO NOT FEEL THAT THE B.L.M. LAND SHOULD BE A PROFIT-TYPE THING. AND I THINK TRANSFERRING THINGS FOR CORPORATIONS TO GET RICH IS NOT A GOOD IDEA. THANK YOU.

MR. READ: THANK YOU. ANYONE ELSE? YES. STAND IN FRONT.

MS. MASKER: MY NAME IS D. J. MASKER, M A S K E R. I AM A CITIZEN OF 29 PALMS. I DID SPEAK LAST NIGHT, AND I DON'T FEEL THAT I WAS AS INFORMED THEN AS I AM NOW. AND TO ALL OF YOU WHO HAVE CONCERNS HERE, I CONGRATULATE YOU FOR YOUR INTEREST. KEEP IT UP.

㊽ I WOULD LIKE TO KNOW WHO HAS THE KNOWLEDGE AND EXPERTISE TO TRY TO GET THIS ON A BALLOT SO WE CAN ALL VOTE FOR IT? WHERE IS OUR RIGHT TO VOTE FOR WHAT WE WANT AND NEED? I THINK OUR RIGHT IS BEING TAKEN AWAY FROM US BY SORT OF SAYING THAT THIS IS A GOOD PLACE TO DUMP THE GARBAGE.

SOMEBODY MAY HAVE ADDRESSED THE POSSIBILITY OF POLLUTION. IT MAY BE IN THE EIR. I HAVE NOT HAD AN OPPORTUNITY TO READ IT. I DON'T KNOW THAT I WILL HAVE THE TIME. BUT IF THE WATER BECOMES POLLUTED OUT THERE, IF THE AIR BECOMES POLLUTED, AS IT IS -- IS COMING OVER THE MOUNTAIN MORE AND MORE DAILY, WE ARE SUFFERING FROM LOS ANGELES, RIVERSIDE, SAN BERNARDINO, ET CETERA, WITH THE SMOG, WHO, HOW IS IT GOING TO GET TAKEN CARE OF? WHO HAS THE MONEY TO TAKE CARE OF IT? ㊾ WE AS TAXPAYERS DO NOT. AND I THINK THAT'S ANOTHER THING THAT MUST BE ADDRESSED BEFORE WE DECIDE TO PUT THE GARBAGE IN A HOLE -- ON THE TOP OF THE EARTH IN CADIZ OR AMBOY, WHATEVER YOU WANT TO CALL IT.

㊿ I WANT TO MAKE SURE THAT I -- AND I LEARNED TONIGHT -- I DID NOT KNOW -- I THOUGHT THIS WAS COMING FROM L.A. COUNTY AND ORANGE

COUNTY. I DID NOT KNOW IT WAS COMING FROM OTHER AREAS. MORE INFORMATION I AM GETTING TONIGHT. (50) CONT.

I WOULD LIKE TO -- I WILL BE WRITING, AND I WOULD LIKE SOME RESPONSE TO THIS OTHER -- WHERE HAVE OTHER SITES BEEN THAT ARE SIMILAR TO THIS? HOW LONG HAVE THEY BEEN ESTABLISHED? WHERE ARE THEY LOCATED? HOW LONG HAVE THEY BEEN IN OPERATION? THINGS OF THAT SORT. I THINK WE AS CITIZENS HAVE A RIGHT TO KNOW THOSE KINDS OF THINGS BEFORE WE HAVE THE GARBAGE DUMPED ON US. (51)

THANK YOU ALL.

MR. READ: THANK YOU. SIR, UP IN THE BACK.

MR. MILLER: MY NAME IS DELBERT, D E L B E R T, MILLER, M I L L E R. NO RELATION TO THE DISTRICT ATTORNEY IN SAN DIEGO. I AM ACTUALLY THE REPRESENTATIVE OF THE SANTA FE RAILROAD AND I WANTED TO ADDRESS A FEW OF THE COMMENTS THAT MR. KIRKHAM MADE.

HE MENTIONED A TRAGIC TRAIN ACCIDENT THAT HAPPENED IN 1989, AND HE SAID THE RAIL CYCLE TRAIN WOULD BE GOING OVER THOSE VERY SAME TRACKS. THE TRAGIC TRAIN ACCIDENT HAPPENED ON ANOTHER RAILROAD OTHER THAN THE SANTA FE RAILROAD. IT WAS A HEAVY TRAIN COMING DOWNHILL THAT LOST ITS BRAKING SYSTEM

AND COULDN'T GET STOPPED. THE RAIL CYCLE TRAIN WILL BE GOING UP A PARALLEL TRACK TO THIS OTHER RAILROAD.

HE MENTIONED EARTHQUAKES. SANTA FE RAILROAD HAS GOT A STATE-OF-THE-ART EARTHQUAKE SYSTEM COMPUTER THAT'S TIED INTO CAL TECH. WE KNOW IN ABOUT 20 SECONDS AFTER AN EARTHQUAKE HAPPENS EXACTLY WHERE IT IS, THE MAGNITUDE. AND, SO, WE CAN TAKE OUR -- PUT OUR EMERGENCY PLAN INTO EFFECT. I DON'T KNOW OF ANY OTHER RAILROAD THAT HAS THAT SYSTEM.

AND WE DON'T HAVE TRAINS BLOWING OFF TRACKS. THAT JUST DOESN'T HAPPEN. THE SANTA FE HAS AN EXCELLENT SAFETY RECORD. WE ARE PROUD OF IT AND WE DON'T LIKE TO BE CONFUSED WITH OTHER RAILROADS. THANK YOU.

MR. READ: THANK YOU. ANYONE ELSE? YES, SIR?

MR. RUSK: MY NAME IS DON RUSK, R U S K. APPRECIATE AN OPPORTUNITY TO SPEAK AT THIS GATHERING TODAY.

IT'S A MATTER OF MAJOR CONCERN, I THINK, IN KEEPING WITH THE SPEAKER BEFORE LAST ABOUT THE VOTERS' PARTICIPATION AND AN ACTIVITY TO REGISTER JUST REALLY WHAT THEY FEEL AND THEIR CONCERNS. I (52)

HAVE MADE SEVERAL INQUIRIES AS TO WHEN THIS
MEETING WAS TO BE HELD, AND ONLY FOUND OUT TONIGHT
BY COMING OVER HERE, AS I HAD BEEN MISCUED. (52) CONT.

WHAT I AM SAYING IS THAT I THINK THIS IS
VERY SERIOUS. I THINK THESE NEED TO BE GONE INTO
VERY THOROUGHLY, THE PRO AND CON, AND THAT I AM
SURE THAT OTHERS WOULD COME TO A HEARING OF THIS
SORT IF THEY REALLY HAD EXPOSURE AND HAD BEEN
NOTIFIED.

I AM NOT SURE HOW OTHERS HAVE FOUND OUT,
BUT IT CERTAINLY HAS TAKEN CONSIDERABLE EFFORT ON
MY PART TO KNOW WHERE TO GET IN TOUCH WITH THE
RIGHT SOURCES. AND EVEN AT THAT I WAS LATE
BECAUSE I HAD BEEN MISCUED.

I AM VERY DEEPLY CONCERNED ABOUT THE
POLLUTANT EFFECT OF THE TRAINS ON THE SITES. I
HAVE BEEN VERY MUCH AWARE OF THE PROBLEMS OF THE (53)
DESERT AND -- THE HIGHER DESERT, NEED FOR
EMPLOYMENT, NEED FOR INDUSTRY. AND I HAVE PERHAPS
BEEN MISGUIDED -- BUT PERHAPS NOT -- THAT THIS
EFFORT AND SIMILAR EFFORTS WOULD CONSUME MOST OF
THE POLLUTANT CRUD AND WOULD BECOME A REAL SERIOUS
THREAT TO OTHER INDUSTRIES COMING INTO THE AREA.
WE RECOGNIZE THAT THERE'S NEED FOR INDUSTRY, A LOT
MORE INDUSTRY TO EMPLOY THE PEOPLE THERE THAT ARE

UNEMPLOYED. AND I HAVE A FEELING OF DEEP CONCERN (53)
THAT SUCH EFFORTS DO NOT ATTRACT THE RIGHT PEOPLE, CONT.
THE RIGHT INDUSTRY.

A POSSIBILITY OF THE POLLUTANT CREDIT
BEING THREATENED. I ALSO -- FOLLOWING UP THE
SPEAKER -- THE LAST SPEAKER REGARDING RESPONSE TO
EMERGENCY. WE MIGHT KNOW WHERE THE PROBLEM IS. (54)
WHAT KIND OF RESPONSE? ESPECIALLY AFTER THE
SPEAKER ON THE FIRE DEPARTMENT. THE POLICING THAT
MIGHT NEED TO BE TAKEN CARE OF IN ISOLATING A
SPOT. SOMEHOW, MISMANAGEMENT.

AND THIS LEADS ME TO ANOTHER MAJOR
CONCERN. WHAT ARE THE REAL GUARANTEES THAT SOME (55)
MATERIALS WOULD NOT BE INCLUDED THAT WOULD BE OF
GREATER DANGER TO HEALTH AND SAFETY. AND THE FACT
THAT IT'S HARD TO GET TO IN THE AREA, AND THE (56)
TRACKS WOULD BE HARD TO SET ASIDE, TAKE THE -- THE
NECESSARY SAFETY AND PROTECTION OF THE PUBLIC AND
POSSIBILITY OF GREATER DEGREE OF POLLUTION. AND I
AM TALKING PRIMARILY OF AIR POLLUTION.

I WANT TO THANK YOU FOR THIS
OPPORTUNITY. I TRUST THAT WE WILL HAVE MORE TIME, (57)
MORE OPPORTUNITY THAN HAS BEEN ALLOWED FOR BEFORE
THIS IS FINALLY APPROVED.

MR. READ: THANK YOU. ANYONE ELSE?

YES, SIR?

MR. SCOTT: MY NAME IS RANDY SCOTT. I AM WITH THE SAN BERNARDINO COUNTY PLANNING DEPARTMENT. I JUST WANT TO MAKE A FEW BRIEF COMMENTS FOR THE BENEFIT OF THE FOLKS THAT CAME OUT AND ARE INTERESTED IN THE PROJECT, JUST TO EXPLAIN THE SAN BERNARDINO COUNTY PROCESS FOR CONSIDERING THIS PROJECT.

THE ENVIRONMENTAL REVIEW THAT'S CURRENTLY UNDER WAY IS BEING DONE JOINTLY BETWEEN THE SAN BERNARDINO COUNTY PLANNING DEPARTMENT AND THE B.L.M.

THE EIR, THE DRAFT WHICH IS OUT FOR REVIEW CURRENTLY, HAS BEEN PREPARED BY AN INDEPENDENT CONSULTANT UNDER CONTRACT TO BOTH AGENCIES. THE -- THIS PROCESS IN TERMS OF RESPONDING TO THE COMMENTS THAT ARE RECEIVED THROUGH THESE HEARINGS AND FORMAL WRITTEN COMMENTS THAT WILL BE SUBMITTED TO EITHER THE B.L.M. OR THE COUNTY WILL BE RESPONDED TO IN WRITING AND WILL CONSTITUTE THE FINAL EIR THAT WILL BE DISTRIBUTED TO ALL THOSE PARTIES WHO HAVE RECEIVED A COPY OF THE DRAFT, PLUS ANYONE ELSE WHO REQUESTS IT.

FOLLOWING DISTRIBUTION OF THE -- AND PREPARATION OF THE FINAL EIR, THE SAN BERNARDINO

COUNTY PLANNING COMMISSION THEN WILL CONDUCT A HEARING TO CONSIDER THE PROJECT WHICH, UNDER COUNTY PROCEDURES, IS A CONDITIONAL USE PERMIT AND A GENERAL PLAN AMENDMENT.

THE PLANNING COMMISSION WILL HOLD A PUBLIC HEARING IN THIS HEARING CHAMBER AND THEN WILL MAKE A RECOMMENDATION ON TO THE BOARD OF SUPERVISORS. AND THE BOARD OF SUPERVISORS WILL BE THE FINAL DECISION-MAKING BODY RELATIVE TO ACTING ON THE PROJECT IN BEHALF OF THE COUNTY.

THE B.L.M. WILL ACT INDEPENDENTLY REGARDING THEIR ACTIONS FOR THE LAND EXCHANGE AND THE RIGHT-OF-WAY GRANTS. I JUST WANTED TO MAKE THAT CLEAR FOR PEOPLE INTERESTED IN FOLLOWING THE PROJECT THROUGH. THANK YOU.

MR. READ: THANK YOU. ONE MORE COMMENT? ANOTHER COMMENT?

MR. BARNES: GOOD EVENING. MY NAME IS KEVIN BARNES, K E V I N B A R N E S. I LIVE IN RUNNING SPRINGS.

AS A SOLID WASTE MANAGER BY PROFESSION, I WOULD LIKE TO POINT OUT ONE FACT THAT MAY TEMPER BOTH SIDES OF THIS. WE DO HAVE A LOT OF ENVIRONMENTAL CONSIDERATIONS TO MAKE THAT HAVE BEEN BROUGHT UP THIS EVENING. HOWEVER, WHEN WE DO

RECYCLE, WHEN WE SORT OUT ALL OF THE STUFF THAT'S IN THE CANS BEHIND ALL OF YOUR HOMES, WE HAVE TO TRANSPORT THAT TOO. SO TAKE LOS ANGELES'S GARBAGE, SORT IT OUT, AND THEN YOU HAVE TO PUT IT ON A TRUCK AND SEND IT SOMEWHERE, WHETHER IT'S NORTHERN CALIFORNIA TO A PAPER MILL, OR TO THE NEW ONE COMING IN ARIZONA, OR TO A GLASS MILL IN THE BAY AREA OR WHAT HAVE YOU.

SO BEAR THAT IN MIND WHEN WE TALK ABOUT THESE TRANSPORTATION ISSUES. THANK YOU.

MR. READ: THANK YOU. THERE APPEARS TO BE NO OTHER COMMENTS. WITH THAT, I ADJOURN THE HEARING.

(THE PROCEEDINGS WERE ADJOURNED AT 8:05 P.M.)

-OOO-

REPORTER'S CERTIFICATE

STATE OF CALIFORNIA)
) SS.
COUNTY OF RIVERSIDE)

I, DIANE L. MARTIN, A CERTIFIED SHORTHAND REPORTER, DO HEREBY CERTIFY THAT THE FOREGOING 35 PAGES COMPRISE A FULL, TRUE, AND CORRECT TRANSCRIPTION OF THE PROCEEDINGS HAD AND THE TESTIMONY TAKEN AT THE HEARING IN THE HEREINBEFORE-ENTITLED MATTER.

DATED THIS 20TH DAY OF FEBRUARY, 1993, AT RIVERSIDE, CALIFORNIA.

Diane L. Martin
DIANE L. MARTIN, C.S.R., R.P.R., C.M.
C.S.R. NO. 8268

DOCUMENT 095
BLM PUBLIC HEARING TRANSCRIPT
SAN BERNARDINO, CALIFORNIA - FEBRUARY 11, 1993
RESPONSE TO COMMENTS

Response 095-1

1. As described in the Draft EIR/EIS, the site for the landfill being proposed by Rail•Cycle is a site known as Bolo Station near Amboy, California. The former Kaiser mine site referred to by the commenter is the site being proposed for a similar waste-by-rail landfill known as the Eagle Mountain Landfill.

Response 095-2

1. The proposed landfill liner and alternate landfill liner systems were described in Section 3.2.4.1 of the Supplement. Based on a exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However the authors clearly make a distinction between liners and liner systems. Further, they state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions."

2. As detailed in Chapter 3.0 of the Supplement, the proposed action includes a double-composite liner system and UZM system to provide 100 percent monitoring coverage under the liner. The monitoring system would provide sufficient time to implement corrective action in the event of a release. The measures included in the EIR/EIS are considered sufficient to mitigate potential ground water quality impacts from the proposed action.

Response 095-3

1. As discussed in the Draft EIR/EIS, the proposed landfill would be served by MRFs rather than transfer stations. There is an important distinction between a MRF and a transfer station. At MRFs, recyclables would be removed from the waste stream prior to transporting the residual waste to the proposed landfill. A transfer station strictly takes waste from small volume route trucks (i.e., normal 8 to 9 tons of waste per truck) and transfers the waste to either a larger truck or container capable of transporting 20 to 25 tons of waste at a time to a landfill. Recycling does not take place at a transfer station.

2. Regarding the MRFs being "hazardous waste stations," an important function that would be performed at the Rail•Cycle MRFs, is the screening for hazardous materials or waste that are not permitted to be landfilled at a Class III landfill. Screening the waste stream for hazardous materials or waste is required by CCR Title 14 and Subtitle D. Specific procedures would be established at the Rail•Cycle MRFs to assure that hazardous materials or waste are removed from the waste stream at the MRF, properly stored in a temporary storage at the MRF (i.e., less than 90 days), and then transported by a licensed hazardous waste transporter to an approved disposal facility or other approved hazardous waste treatment facility, in accordance with applicable federal and state regulations.

Response 095-4

1. The cost for processing the waste stream through a MRF and transporting the residual waste to the proposed landfill would be the subject of negotiation between Rail•Cycle and cities that wish to contract with Rail•Cycle for solid waste disposal services. Due to the additional processing of waste and the increased transportation distance, it is considered likely that initially the cost for disposal of waste through a waste-by-rail system, such as Rail•Cycle, would be higher than for curbside pick up and direct disposal at a landfill. However, as landfills reach their capacity and close down and the waste is transported to more distance landfills, it is expected that the cost for disposal would begin to normalize.

2. Another factor that is considered likely to increase the cost for waste disposal, is that many cities are proposing to process their waste through MRFs even if the residual is disposed of at nearby landfills. The use of MRFs is viewed by cities as an important method to meet the diversion requirements of AB 939.

Response 095-5

1. The process described by the commenter involves the thermal destruction of asbestos. Certain kinds of asbestos can be disposed of at Class III landfills. If asbestos is accepted for disposal at the proposed landfill, it would be handled in accordance with applicable state and federal regulations.

Response 095-6

1. As discussed in Response 095-5, the proposed action does not involve transport or disposal of hazardous or special waste.

Response 095-7

1. See Response 095-5.

Response 095-8

1. The facility referred to in this comment is a transfer station, not a MRF. See Response 095-3 for a discussion of the difference between a MRF and a transfer station.

2. The issues raised by this comment regarding the transfer station in Anaheim would not occur at a MRF.

Response 095-9

1. The rail accident referred to by the comment did not involve an ATSF train or the ATSF rail line. The accident involved a Union Pacific train on a Union Pacific rail line.

2. This comment is incorrect in stating that the rail line on which the accident occurred would be used to transport waste to the proposed Bolo Station Landfill. The rail line that would be used to transport waste to the proposed landfill is owned and operated by ATSF.

Response 095-10

1. The "nuclear dump facility" referred to by this comment is the proposed Ward Valley Low-Level Radioactive Waste Facility. This proposed facility is not located on a rail line, therefore it has no cumulative impact with the proposed action regarding transport of waste by rail.

Response 095-11

1. As discussed in Section 4.12.1.2 of the Draft EIR/EIS most rail segments that would be utilized by Rail•Cycle are double track and can provide service on at least one of the tracks in an emergency. ATSF maintains a supply of maintenance equipment and materials in strategic locations to enable it to respond immediately to situations such as that which occurred near Hesperia, thereby minimizing or precluding any service disruption. In addition, significant track blockages in which both tracks are affected can normally be cleared and rail service restored within 24 hours. In the event rail blockages extend beyond 24 hours, alternative routes are available as shown in Figure 4.12.3 of the Draft EIR/EIS. ATSF has holding tracks which can hold trains in progress at Barstow, San Bernardino, and Los Angeles. Additional container equipment is also available in Los Angeles and other locations, therefore, track blockages are not expected to affect operations at MRFs.

2. ATSF also has reciprocal agreements with both the Union Pacific Railroad and the Southern Pacific Transportation Company for alternative routing and detour of trains in the event of a significant emergency. Although detour routing is seldom required, these alternative routes provide access to the Bolo Station site and could be used for such emergencies.

Response 095-12

1. This states the commenter's opinion regarding the proposed action but does not provide a specific comment regarding an environmental issue or the Draft EIR/EIS. No specific response is required.

Response 095-13

1. See Response 095-12.

Response 095-14

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS, the environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public

Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

Response 095-15

1. As discussed in Chapter 2.0 of the Supplement, at present the projected worst-case solid waste disposal capacity shortfall after AB 939-mandated source reduction and recycling requirements have been met, is expected to be approximately 16,000 tons per day in metropolitan Los Angeles County alone by 2005. This shortfall in metropolitan Los Angeles County is projected to increase to approximately 35,000 tons per day by 2014 (Chapter 2.0 of the Supplement, Table 2.3). This need, when considered with the 8 years of remaining capacity in San Bernardino County (Chapter 2.0 of the Supplement, Table 2.1), indicates that two regional landfills on the scale of the proposed action may be needed to enable southern California jurisdictions to comply with AB 939, which requires that cities and counties demonstrate 15 years of landfill capacity. For more detailed information on the purpose and need for the proposed action, refer to Chapter 2.0 of the Supplement.

2. Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. As discussed in Chapter 2.0 of the Supplement, a commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

3. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal, at the discretion of the city or county.

4. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

5. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

6. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement), confirms that even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California. Additional use of recycling practices conducted by Rail•Cycle at the proposed site was eliminated from further detailed analysis in the EIR/EIS, because waste transported to the site would be post-recycled waste or waste processed through MRFs.

Response 095-16

1. Chapter 5.0 of the Draft EIR/EIS and Section 3.3 of the Supplement evaluated the potential impacts of both the proposed action and its feasible alternatives.

2. The No Action Alternative, while it would eliminate significant unavoidable environmental impacts identified for the proposed action at the Bolo Station site, would not eliminate the need for substantial additional landfill capacity. It can be assumed that this capacity would have to be developed elsewhere in southern California, especially since one of the requirements of AB 939 is that cities and counties demonstrate at least 15 years of landfill capacity. Because the unavoidable impacts associated with the Bolo Station site (e.g., visual change; air quality; use of ground water) would, with the possible exception of ground water use, be the same at any other landfill site, the potential exists that these other sites would have greater environmental impacts than the proposed site.

Response 095-17

1. The proposed action has been designed to accommodate, at least initially, solid waste generated by Los Angeles County that cannot be

disposed locally. As discussed in Chapter 2.0 of the Supplement, efforts to develop additional landfill capacity in Los Angeles County have not been sufficient to accommodate the large volume of waste projected to be generated, even after AB 939-mandated diversion requirements are met. AB 939 requires cities and counties to provide for at least 15 years' capacity for environmentally safe landfill disposal, in recognition of the fact that landfill disposal of solid waste remains, for the time being at least, essential to the public welfare.

Response 095-18

1. See Response 095-16.

Response 095-19

1. As discussed in Section 3.7 of the Draft EIR/EIS, the site selection process for the proposed landfill included a criterion that the site should be compatible with existing and future land uses. This criterion included consideration of regionally significant existing and future open space resources such as the East Mojave National Scenic Area, WSAs designated in the CDCA, the WSAs proposed for inclusion in the pending California Desert Protection Act, and the proposed Mojave Desert National Park included in the pending California Desert Protection Act. As discussed in Section 5.14 of the Draft EIR/EIS, the proposed project would not impact regionally significant existing or future open space resources.

2. The selection of the proposed site reflects, in part, a recognition of the existing development in the project area including:

   - Mineral production (salts) on and surrounding the Bristol Dry Lake (i.e., Cargill and National Chloride).
   - Modest development at Amboy and Chambless.
   - Transportation corridors (i.e., rail, road and pipelines).
   - Intensive agricultural operations at Cadiz (i.e., CLC).

   As noted in Section 5.14 of the Draft EIR/EIS, based on the avoidance of regionally significant existing and future open space resources, and the nature and extent of the existing development in the project area, while the proposed project is considered to have a significant impact on open space in the local vicinity of the site, the proposed project is not considered to have a significant impact on regional open space.

Response 095-20

1. See Responses 095-15 and 095-16.

Response 095-21

1. Although the proposed action alone appears quite large, the project would result in the loss of only approximately 0.04 percent of the total available open space in the San Bernardino County desert region. The proposed action would not affect any watershed. Furthermore, the proposed action would not affect any critical wildlife habitat area. Based on the above, the proposed action is consistent with the referenced Management Goal of the County General Plan.

Response 095-22

1. The two and one-half sections (1,600 acres) of public lands managed by BLM that would be affected by the landfill would be exchanged for three sections (1,920 acres) of higher quality land with regard to open space and wildlife habitat, as determined by BLM. This exchange would assist BLM in attaining its goal of consolidating ownership of public lands.

Response 095-23

1. See Response 095-19.

Response 095-24

1. Subsequent to distribution of the Draft EIR/EIS, additional analysis regarding ground water quantity was completed for the proposed action and included in the Supplement (Sections 4.2 and 5.2). This subsequent analysis concluded that the proposed action would not adversely affect other ground water users in the area (i.e., Cargill, National Chloride, or CLC). Cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin. In the event that Bristol Basin is in overdraft, it would be considered a significant unavoidable adverse impact.

2. Based on additional analysis, only minor ground subsidence is expected to occur with the withdrawal of ground water for the proposed action.

Response 095-25

1. Potential noise impacts associated with the proposed action have been clarified as part of the subsequent analysis for the Supplement

(Sections 4.5 and 5.5). Based on the additional analysis it was determined that noise impacts would not be significant, and therefore do not require mitigation.

Response 095-26

1. It is expected that the landfill would be visible for many miles, primarily because of its elevation above the mostly flat floor of the desert in the region of Bristol Dry Lake. Examples of how the proposed landfill would appear to a person looking south from Route 66 and looking west from Cadiz Road were shown in Figures 5.9.2 and 5.9.3 of the Draft EIR/EIS.

2. As stated in Section 5.5.1 of the Draft EIR/EIS, landfill cells would be revegetated as a final step in the closure of each cell. Because the landfill would be developed and closed in segments, the portion that is absent vegetation would be minimized. Depending on the stage of landfill development, some portions of the site would be undisturbed, while others are receiving waste, being prepared to receive waste, being closed, or closed. This operational pattern would minimize visual impacts to the extent possible, given the size of the completed landfill.

3. Section 5.9.7 of the Draft EIR/EIS acknowledged that visual impacts would be significant and unavoidable in compliance with CEQA, and would require a statement of overriding considerations.

Response 095-27

1. As discussed in Section 3.3.2.6 of the Draft EIR/EIS, one landfill gas flare would be installed when the landfill gas collection system begins to produce sufficient volumes of gas to make operation of a flare practical. Based on anticipated waste volumes and projected landfill gas generation rates, sufficient volumes of landfill gas are expected to be generated within three to five years of the start of landfilling operations.

2. The flare would be located at the northwest corner of the landfill area adjacent to Landfill Cell No. 2 (see Figure 3.1 of the Supplement for the location of Cell No. 2). The specific location of the flare at the northwest corner of the landfill would be determined during final design and engineering of the landfill gas collection system.

Response 095-28

1. As discussed in Section 5.6 of the Draft EIR/EIS, impacts to wildlife would be considered significant in the event of:

   - Disturbance of protected or sensitive species or of habitat that support such species.
   - Substantial diminishment of habitat for wildlife species.
   - Substantial interference with the movement of resident or migratory wildlife species.

   None of these impacts would occur from implementation of the proposed action even during night operations. Therefore, the mitigation measures proposed are sufficient.

Response 095-29

1. In response to this and other comments, additional mitigation measures for stationary and mobile air emission sources associated with the proposed action were included in the Supplement (see Sections 4.4 and 5.4). However, even with implementation of the mitigation measures in the EIR/EIS, air quality impacts will not be reduced to below a level of significance and these impacts are considered to be unavoidable and adverse.

Response 095-30

1. The County and BLM may wish to consider establishing a "Citizen's Advisory Task Force" as suggested by this comment.

Response 095-31

1. The Rail•Cycle project and surrounding community are served by the County Forestry and Fire Warden Department. The County Forestry and Fire Warden Department would provide emergency services for the proposed action and surrounding community through a new County fire station to be constructed by Rail•Cycle near the entrance of the proposed landfill. Appropriate firefighting equipment and County firefighting personnel would be provided at this new fire station. County fire personnel will be trained as Emergency Medical Technicians and as HAZMAT fire responders.

2. The County Forestry and Fire Warden Department has reviewed the requirements of the proposed action, including the transport of waste-by-rail through the high desert portion of the County, and

has determined that the proposed action would not have a significant impact on the Department's ability to provide emergency services (Miller, 1993). Rail•Cycle, as with all citizens and private enterprises, would be responsible for civil cost recovery under the California Health and Safety Code 13009.

3. The Wonder Valley Fire Department has no legal requirement to provide services outside its district, except for its mutual aid agreements.

Response 095-32

1. It is expected that the establishment of a new County fire station at the entrance to the proposed landfill (see Response 095-31) would decrease the requirements for the Wonder Valley Fire Department to service the Amboy area. To the extent that emergencies could be handled by personnel and equipment at the new station, the Wonder Valley Fire Department would not be involved.

Response 095-33

1. See Response 095-15.

Response 095-34

1. Section 5.8.5 of the Draft EIR/EIS includes mitigation measures in the event of a train derailment.

Response 095-35

1. The geophysical survey and trenching analysis requested by the RWQCB was completed to verify the response or absence of active and potential active faults at the proposed site (Jacobs, 1993a). This analysis confirmed the previous findings and conclusion that there are no Holocene faults at or trending towards the proposed site. For a complete discussion of the results of this verification analysis, see Chapters 4.0 and 5.0 of the Supplement.

Response 095-36

1. There is no evidence that the intermodal railcars and double stack containers that would be used to transport waste to the proposed landfill, are in danger of being blown off the track by high velocity winds.

Response 095-37

1. The proposed Bolo Station Landfill would only accept solid waste which has already undergone source reduction and recycling according to applicable local, state, and federal regulations. For more information on the relationship of recycling to the proposed action, see Response 095-15.

Response 095-38

1. See Response 095-14.

Response 095-39

1. The comment refers to another project (Ward Valley Low-Level Radioactive Waste Facility) that is beyond the scope of this EIR/EIS to address except in relationship to cumulative impacts. See Chapter 6.0 of the Draft EIR/EIS for a discussion of cumulative impacts.

Response 095-40

1. See Response 095-39.

Response 095-41

1. As presented in Table 6.1 of the Draft EIR/EIS, the following landfill/waste treatment facilities are being proposed within the study region of the Bolo Station Landfill:

   - Broadwell Basin Hazardous Waste Residuals Repository.
   - Hidden Valley Residual Repository.
   - Ward Valley Low-Level Radioactive Waste Facility.
   - Eagle Mountain Landfill.

   The discussion of the proposed project's cumulative impacts, provided in Chapter 6.0 of the Draft EIR/EIS considered the effect of development of these projects along with the proposed action.

Response 095-42

1. See Response 095-41.

Response 095-43

1. CEQA provides for the discussion of a "reasonable range" of alternatives. The discussion need not be exhaustive but rather is intended to provide adequate information for a comparative analysis of potential impacts. A clarified discussion of project alternatives was provided in Section 3.3 of the Supplement.

Response 095-44

1. The environmental effects of the proposed action with the potential to affect the Cargill and CLC operations were discussed in the Draft EIR/EIS and Supplement.

Response 095-45

1. See Response 095-41.

Response 095-46

1. The environmental effects of the proposed action which might affect the CLC operations were discussed throughout the Draft EIR/EIS and Supplement.

Response 095-47

1. The proposed action includes the exchange of two and one-half sections (1,600 acres) of public lands managed by BLM for three sections (1,920 acres) of land owned by ATSF. The three sections of land were selected by the BLM primarily on the basis of their wildlife habitat values, particularly for desert tortoise.

Response 095-48

1. This comment does not raise environmental issues regarding the EIR/EIS. No specific response is required.

Response 095-49

1. The MDAQMD has primary responsibility for ensuring that air pollutant emissions from the proposed landfill would not constitute a nuisance or threat to public health and welfare. Section 5.4 of the Supplement presented a detailed description of the measures which will be taken to reduce the potential impacts of new air pollutant emissions associated with the proposed landfill.

Response 095-50

1. The proposed action was designed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for additional Class III landfill disposal capacity. It is expected that at least initially the primary source of solid waste for the proposed Bolo Station Landfill would be Los Angeles County. Other counties in southern California could contract with Rail•Cycle to dispose of waste at the proposed landfill.

Response 095-51

1. As described in Chapter 2.0 of the Supplement, a rail-haul landfill exists in Carbon, Utah, and two sites in eastern Oregon and Washington have received municipal solid waste by rail from Seattle and Puget Sound commenters since 1991. There are currently no other similar rail-haul projects operating in California, although there are numerous other Class III landfills throughout the state.

Response 095-52

1. The BLM has a standard list of approximately 600 agencies, elected officials, groups, individuals, and electronic and print news media that are notified regarding the availability of documents, such as the Draft EIR/EIS for Rail•Cycle, and regarding public meetings, such as the three public hearings held on the Draft EIR/EIS. In addition, the County provided the Notice of Availability of the Draft EIR/EIS to various newspapers in the region including the following:
   - Desert Dispatch
   - Desert Sun
   - Desert Trail
   - Hi-Desert Star
   - Inland Valley Daily Bulletin
   - Los Angeles Times
   - The Sun
   - Riverside Press-Enterprise
   - Victorville Daily Press

2. The Notice of Availability, which was also found in the Draft EIR/EIS, included the place, date and time for the three BLM public hearings on the Draft EIR/EIS.

3. The distribution process for the Draft EIR/EIS and the announcement process for the public hearings met the requirements of CEQA and NEPA. While a reasonable effort was made by the County and BLM to notify the public about the availability of the Draft EIR/EIS and the public meetings, it is not possible to assure that each interested individual is notified.

Response 095-53

1. Based on comments on the Draft EIR/EIS, additional analysis regarding potential air quality impacts were completed for the proposed action. Sections 4.4 and 5.4 of the Supplement included refinement and reevaluation of the impacts and

mitigation. The additional analysis included potential emissions outside of the County. MDAQMD has reviewed and submitted comments on the EIR/EIS, and have concurred with the primary finding that the proposed action will have a significant impact on air quality after mitigation.

Response 095-54

1. See Response 095-31.

Response 095-55

1. As discussed in Section 5.8.1.1.4 of the Draft EIR/EIS, a comprehensive hazardous material/waste load checking program would be implemented as part of the proposed project. The Draft EIR/EIS did not include specific details regarding load checking, therefore, additional information is provided below to respond to this comment.

2. Prior to each waste load arriving at the working face of the landfill, the following four separate checks for hazardous material/waste would occur:

   - Each hauler transporting waste to the MRFs or other processing facility would be responsible for inspecting the waste for hazardous or suspicious waste. Waste haulers utilizing a specific MRF or processing facility would have a contract or business agreement with the MRF or other processing facility specifying their responsibility for waste inspection. Waste from unknown waste haulers would not be accepted without a thorough inspection of the load.

   - Each load entering the MRFs or other processing facility would be visually inspected for hazardous or suspicious waste when the load is emptied on the tipping floor. Personnel at the facility would receive training in the identification and handling of hazardous or suspicious waste. Hazardous waste identified would be removed from the waste stream and temporarily stored (i.e., less than 90 days) in an appropriate area of the facility. Periodically these wastes would be transported by a licensed transporter to an approved disposal facility or other approved hazardous waste treatment facility, in accordance with applicable federal and state regulations.

   - Waste passing through the MRFs or processing facility would undergo an additional visual inspection as part of the process. Hazardous waste identified through this process would be handled and managed as described above.

   Each load arriving at the working face of the landfill would be visually inspected by landfill personnel trained to identify and handle hazardous or suspicious waste. Hazardous waste identified through this inspection would be taken to the temporary (i.e., less than 90 days) hazardous waste storage facility at the landfill. This facility is described in Section 3.3.2.4 of the Draft EIR/EIS. Periodically the wastes would be transported by a licensed transporter to an approved disposal facility or other approved hazardous waste treatment facility, in accordance with applicable federal and state regulations.

3. In addition to the process described above, in accordance with Subtitle D, a random load check program would be implemented at each MRF or other processing facility and the landfill. Selected loads would be tipped at a designated area at the facility or landfill and a thoroughly inspected. The number of loads randomly selected would be established as part of the permitting process for each facility and the landfill by the CIWMB and responsible LEA.

4. As stated in Section 5.8.1.1.4 of the Draft EIR/EIS, to assure that waste transported to the proposed landfill has undergone a load checking program, Rail•Cycle would not accept waste from MRFs not operated by WMNA unless the operator provides evidence of an equivalent load checking program. For waste from a MRF to be accepted for transport to the proposed landfill, the MRF must have a valid SWFP issued by the responsible LEA and CIWMB, and demonstrate its compliance with applicable conditions of the permit.

5. Hazardous waste and other special wastes defined by the California Health and Safety Code Title 22 would not be accepted at the proposed landfill. However, small quantities of hazardous waste, primarily household hazardous waste, may inadvertently enter the waste stream. The load checking program described above is expected to limit the volume of hazardous waste and household hazardous waste reaching the working face to less than 0.5 to 1 percent of the total volume; however, small amounts of these waste are still expected to reach the working face. It is for this reason that state and federal regulations (i.e., CCR Titles 14 and 23, and Subtitle D) require landfill liners and leachate collection systems.

Response 095-56

1. Public health and safety issues were addressed in Section 5.8 of the Draft EIR/EIS. Regulatory requirements and recognized industry standards included as part of the proposed action are expected to reduce impacts to below a level of significance.

Response 095-57

1. The EIR/EIS for the proposed Bolo Station Landfill is the first step in the process being conducted by the County and BLM to determine whether to approve or deny the proposed action. No decisions have been made by the County Planning Commission, County Board of Supervisors, or BLM regarding the proposed action.

2. The information in the EIR/EIS will be evaluated by the County Planning Commission during public hearings that will be conducted once the EIR/EIS is complete. The Planning Commission will then make a formal recommendation to the Board of Supervisors regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

3. The Board of Supervisors will consider the information in the EIR/EIS and the recommendation by the County Planning Commission during public hearings regarding the proposed landfill. The County Board of Supervisors will then vote regarding approval, approval with conditions or modification to the project, or denial of the proposed landfill.

4. The public is encouraged to make its concerns known regarding the proposed landfill to the County Planning Commission and Board of Supervisors.

CHAPTER 3.0
SPECIFIC RESPONSES TO COMMENTS ON THE SUPPLEMENT

3.0 SPECIFIC RESPONSES TO COMMENTS ON THE SUPPLEMENT TO THE DRAFT EIR/EIS

1. This chapter provides specific responses to public and agency comments on the Supplement. Approximately 550 copies of the Supplement were distributed to agencies, organizations, and the public. The County and BLM received 42 letters that provided comments on the Supplement.

2. Included in this chapter is a copy of each comment letter. Each comment letter has been assigned a three digit document control number. See Table 3.1 for a listing of the comment letters received and the corresponding document control numbers. The comment letters have been organized by federal agencies, state/regional agencies, county/local agencies, organizations, and individuals.

3. Specific comments in each letter have been assigned a sequential comment number. Specific responses to each comment are annotated by the document control number and the assigned comment number (e.g., S-01-1).

4. Section 3.1 through 3.5 include the comment letters and the specific responses to each comment. Responses to a specific comments may be found immediately following the comment letter.

5. Many of the comments raised essentially identical issues or concerns. To provide consistency and aid in the review of this Final EIR/EIS, standard responses were developed and incorporated as appropriate in responding to recurring comments.

TABLE 3.1

LIST OF COMMENTERS ON THE SUPPLEMENT

Page 1 of 2

DOCUMENT NUMBER	COMMENTER
FEDERAL AGENCIES (See Section 3.1)	
S-01	U.S. Department of Health and Human Services Centers for Disease Control
S-02	Department of the Air Force - Edwards Air Force Base
S-03	U.S. Environmental Protection Agency
S-04	U.S. Department of the Army
S-05	U.S. Department of the Interior - Geological Survey
STATE/REGIONAL AGENCIES (See Section 3.2)	
S-06	Governor's Office of Planning and Research
S-07	State Lands Commission
S-08	California Integrated Waste Management Board
COUNTY/LOCAL AGENCIES (See Section 3.3)	
S-09	San Bernardino County, Interoffice Memorandum Pamella Bennett, Department of Environmental Health Services
S-10	Imperial County Planning Department
S-11	Mojave Water Agency
ORGANIZATIONS (See Section 3.4)	
S-12	Silver Valley Realty - Letter to County
S-13	Morongo Basin Conservation Association
S-14	Silver Valley Realty - Letter to BLM
S-15	Sierra Club - San Gorgonio Chapter
S-16	Desert Environmental Response Team - Ray Kirkham and Lynne Shmakoff
S-17	Desert Citizens Against Pollution
S-18	Cargill Salt Division
S-19	Rogers & Wells
S-20	Morris A. Balderman
S-21	Roy J. Shlemon
S-22	E. Douglas Schwantes
S-23	Frank J. Hager
S-24	Cadiz Land Company, Inc.
S-25	LASER - Landfill Alternatives Save Environmental Resources

TABLE 3.1

LIST OF COMMENTERS ON THE SUPPLEMENT
(Continued)

Page 2 of 2

DOCUMENT NUMBER	COMMENTER
ORGANIZATIONS (Continued)	
S-26	Citizens' Advisory Committee for Rail•Cycle Project
S-27	Eagle Mountain Landfill and Recycling Center
S-28	CSA-70 Fire and Road Commission
S-29	The Environmental Solutions Project
S-30	Citizens for a Better Environment
S-31	Newberry Springs Harvard Property Owners Association
S-32	Friends of San Gabriel River
INDIVIDUALS (See Section 3.5)	
S-33	Lynnette Shmakoff
S-34	Andrew Vesselinovitch
S-35	William R. Pratt
S-36	Heather Hahn
S-37	D.J. Masker
S-38	Christine Carraher
S-39	Arlene Lucas
S-40	Esther L. Herbert
S-41	Dr. Howard G. Wilshire
S-42	John Stevens

91-109 (7/5/94/cm)

SECTION 3.1

FEDERAL AGENCIES COMMENTS AND RESPONSES

S-01

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
Atlanta GA 30341-3724

RECEIVED
BUREAU OF LAND MANAGEMENT
94 JAN 24 PM 12:33
CA. DESERT DISTRICT
RIVERSIDE, CA.

January 21, 1994

Mr. Doug Romoli
Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, California 92507-0714

Dear Mr. Romoli:

Thank you for sending a copy of the Supplement to Draft Environmental Impact Report/Environmental Impact Statement for the Rail-Cycle-Bolo Station Landfill. We are responding on behalf of the U.S. Public Health Service.

We believe the comments we provided on the Draft EIS on January 28, 1993, have received adequate consideration in this Supplement. We have no additional comments to add at this time. ①

Thank you for adding this address to your mailing list to receive future DEIS's which may indicate potential public health impacts and are developed under the National Environmental Policy Act (NEPA).

Sincerely yours,

Kenneth W. Holt

Kenneth W. Holt, M.S.E.H.
Special Programs Group (F-29)
National Center for Environmental Health

DOCUMENT S-01
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL
RESPONSE TO COMMENTS

Response S-01-1

1. No specific comments on the Supplement. See Chapter 2.0 of this Final EIR/EIS, Document 002 for responses to this agency's comment on the Draft EIR/EIS.

S-02

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE FLIGHT TEST CENTER (AFMC)
EDWARDS AIR FORCE BASE, CALIFORNIA

7 Feb 94

AFFTC/XRX
1 South Rosamond Blvd.
Edwards AFB, CA 93524-1036

County of San Bernardino
Planning Department
Attn: Mr. Randy Scott
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92425-0182

Dear Mr. Scott

Thank you for the opportunity to comment on the draft Environmental Impact Report/Statement (EIR/EIS) Supplement for the Rail-Cycle Bolo Station Landfill Proposal. Based on the information provided, the Air Force Flight Test Center (AFFTC) at Edwards AFB has no comments regarding this Draft EIR/EIS Supplement. ①

The AFFTC appreciates the continued efforts of your department in assuring compatible land use in the San Bernardino County area. If you need further assistance, please contact the undersigned or David Rose at (805) 277-3837.

Sincerely

ROBERT D. JOHNSTONE
Chief, Plans and Policies Division

DOCUMENT S-02
DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE FLIGHT TEST CENTER
EDWARDS AIR FORCE BASE, CALIFORNIA
RESPONSE TO COMMENTS

Response S-02-1

1. No specific comments.

S-03

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

RECEIVED
BY____

February 17, 1994

Mr. Doug Romoli
Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, CA 92507-0714

Dear Mr. Romoli:

The U.S. Environmental Protection Agency has reviewed the Supplement to the **Draft Environmental Impact Statement (DEIS)** for **the Rail•Cycle-Bolo Station Landfill, San Bernardino County, California.** Our comments on this document are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementation Regulations, and EPA's authorities under §309 of the Clean Air Act.

The DEIS evaluates alternatives for construction and operation of a municipal solid waste landfill in San Bernardino County. The landfill at Bolo Station would be located on 4,800 acres of land, 1,600 acres of which is currently federal land managed by the Bureau of Land Management (BLM). The proposed action would include exchange of 1,600 acres of federal land for 1,920 acres of privately owned land, amendment of the California Desert Conservation Area Plan, and granting of right-of-ways. Up to 21,000 tons of municipal solid waste would be transported by rail each day from various southern California cities to the 2,100-acre landfill over a period of up to 100 years. Alternatives to the proposed action include the Cadiz Valley Alternative, the Reduced Action Alternative, and the No Action Alternative. The Supplement to the DEIS revises or clarifies information for the proposed action regarding purpose and need for the action, description of the proposed action, geology and soils, surface hydrology and groundwater, mineral resources, air quality, and noise.

① Although the Supplement revises or clarifies some of the issues we commented on in our February 26, 1993, letter regarding the DEIS, many of our comments in that letter still apply to the DEIS as supplemented. We have reiterated them in the attached comments. EPA continues to have objections to the project as proposed based on its potential impacts to air quality. Furthermore, additional information is still needed in the Final Environmental Impact Statement (FEIS) regarding air quality impacts and mitigation, groundwater monitoring, waters of the U.S., hazardous waste, biological resources, and wilderness areas. ① CONT.

S-03

We appreciate the opportunity to review this Supplemental DEIS. Please send a copy of the FEIS to this office at the same time it is officially filed with our Washington, D.C., office. If you have any questions, please call me at (415) 744-1584 or Jeanne Geselbracht at (415) 744-1576.

Sincerely,

Jacqueline Wyland, Chief
Office of Federal Activities

Enclosure

001165/93-505

cc: Randy Scott, San Bernardino County Planning Department
Robert Perdue, California RWQCB, Region 7
San Bernardino County Air Pollution Control District
Bernie Vlach, California Integrated Waste Management Board

Air Quality

1. On December 21, 1993, the entire County of San Bernardino was designated as a federal non-attainment area for PM10 (particulates smaller than 10 microns). In addition, the site is located close to the Southeast Desert non-attainment area for ozone, and some of the materials recovery facilities and train routes to Bolo Station would be located in federal non-attainment areas for ozone, carbon monoxide, and PM10. Section 5.7.1.2.1 (DEIS, p. 5.7-8) states that the proposed project would result in exceedences of State and federal PM10 standards as well as a four percent increase in combined nitrogen oxide (NOx) and reactive organic gas (ROG) emissions in the Southeast Desert Air Basin. ②

Pursuant to §176(c) of the Clean Air Act (CAA), as amended November 15, 1990, there is an affirmative responsibility imposed on all federal agencies to assure that their actions conform to the attainment (implementation) plan as approved for the area. It is these provisions of the CAA which address whether or not the project would interfere with attainment or maintenance. Pursuant to §176(c), conformity to an implementation plan means:

> "conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards; and
>
> "that such activities will not (i) cause or contribute to any new violation of any standard in any area; (ii) increase the frequency or severity of any existing violation of any standard in any area; or (iii) delay timely attainment of any standards or any required interim emission reductions or other milestones in any area." ③

On November 30, 1993, EPA published a Final Rule in the Federal Register on "Determining Conformity of General Federal Actions to State and Federal Implementation Plans." It appears that the requirements of the Final Rule would not apply to the land exchange portion of the proposed action [see discussion of applicability at §93.153(c)(2)(xiv)]. However, we believe that the Final Rule would apply to the right-of-way grants which BLM would issue to the project applicant. The FEIS should acknowledge the specific requirements of §176(c) of the federal Clean Air Act and the Final Rule and discuss how these requirements would be met. Specifically, the BLM should determine the portions of the project to which the conformity requirements of the Final Rule apply. For those portions of the project to which the Final Rule applies, the EIS should discuss whether air pollutant emissions would exceed de minimis levels [see §93.153(b)(1)] and, if so, include a conformity determination. The FEIS should address conformity for each of the alternatives evaluated. ③ CONT.

2. The DEIS states that the proposed action may not be consistent with the County's 1991 Air Quality Attainment Plan (page 5.7-17), which was developed pursuant to the California Clean Air Act. Furthermore, the DEIS indicates that the four percent increase in combined NOx and ROG in the Southeast Desert Air Basin would result in an increase in the frequency and magnitude of exceedences of the State ozone standards in the area. The FEIS should discuss whether, and to what degree, the proposed project would cause or contribute to new violations of federal ozone, PM10, and carbon monoxide standards in the Basin. The FEIS should discuss how and to what extent these impacts would be mitigated. ④

3. The FEIS should identify the federally designated non-attainment areas potentially affected by any aspect of the proposed project as well as the potential impacts of the proposed project on these areas. ⑤

4. The DEIS lists impacts that would be considered significant if they were to occur as a result of the proposed project (p. 5.7-1). This list should also include as a significant impact failure to conform to the approved attainment plan pursuant to §176 of the Clean Air Act. ⑥

5. The projected PM10 emission rate of approximately 175 tons per year from the proposed project's gas management system would render the landfill a major new source for PM10. The project proponents may need to apply to the San Bernardino County Air Pollution Control District for New Source Review. The project proponents should consult with the District regarding this issue. The FEIS should discuss the New Source Review permitting requirements applicable to the proposed project. ⑦

6. The DEIS includes a list of measures incorporated into the project design in order to minimize or mitigate impacts to air quality (pages 5.7-18, 5.7-21). The FEIS and Record of Decision should include a commitment to these measures as well as other measures to fully mitigate project-related air quality impacts. ⑧

Water Resources

1. The FEIS should summarize the screened intervals of the monitoring wells and piezometers and the geologic units spanned by the intake intervals. ⑨

2. Because concentrations of total dissolved solids (including metals such as barium and chromium) vary widely in the groundwater beneath the proposed facility, the FEIS should specify how the background groundwater quality will be represented pursuant to 40 CFR §258.51(a)(1). ⑩

3. According to the DEIS, Chambless Wash is not a tributary to a water of the U.S. because no evidence of a high water mark could be found (p. 4.4-9). However, evidence of a high water mark is not the only factor defining a water of the U.S. If the wash has a defined bed and bank and is a tributary to waters of the U.S., it may in fact be a water of the U.S. The FEIS should discuss any evidence of these other features. ⑪

Resource Conservation and Recovery Act

Even if the landfill leachate is not a characteristic RCRA waste, the sludge from the evaporation ponds could be. If the sludge is a characteristic RCRA waste, it would be subject to the provisions of RCRA Subtitle C. The FEIS should discuss the treatment and management of the evaporite sludge in the leachate evaporation ponds. ⑫

Biological Resources

The proposed project would disturb or eliminate 50 acres of desert wash scrub and 480 acres of sand dunes at Bolo Station. The FEIS should provide an estimate of the acreage of sand dunes on the Cadiz offered land site and the acreage of desert wash scrub on the combined offered lands. ⑬

Land Management

Currently under consideration in the U.S. Congress are bills that would designate certain lands in the California desert as wilderness, national parks, and monuments. The FEIS should discuss any potential impacts of the proposed project on lands that are being considered for special designation such as the Bristol Mountains, Cadiz Dunes, and Old Woman Mountains proposed wildernesses. ⑭

DOCUMENT S-03
U.S. ENVIRONMENTAL PROTECTION AGENCY
RESPONSE TO COMMENTS

Response S-03-1

1. Responses to EPA's comment letter regarding the Draft EIR/EIS are included in Chapter 2.0 of this Final EIR/EIS, Document 003. In this chapter (i.e., Chapter 3.0), a summary response is provided for those comments that reiterated the EPA's issues regarding the Draft EIR/EIS. The reader is referred to the appropriate response in Chapter 2.0 of this Final EIR/EIS for a more complete response. Specific responses to new issues raised by EPA's comment letter on the Supplement follow this response.

Response S-03-2

1. Comment acknowledged. Revisions to the Draft EIR/EIS included in Chapter 1.0 of this Final EIR/EIS, specify the nonattainment status of the air basins affected by the proposed project, including the recent (i.e., December 1993) designation of the SEDAB portion of the County of San Bernardino as a nonattainment area for PM_{10}.

Response S-03-3

1. This comment discusses the specific requirements of Section 176 (c) of the Federal Clean Air Act, the Final Rule, and the extent to which the conformity requirements apply to the proposed Bolo Station Landfill. The BLM concurs with the EPA's assessment that the Final Rule would not apply to the land exchange portion of the proposed action, and would only apply to the right-of-way easements which BLM would issue Rail•Cycle.

2. Rail•Cycle would apply for right-of-way easements for a temporary project access road (approximately 580 linear feet), to be used during the initial nine-month construction period and for an offsite easement for the construction of a power line to the site. Air emissions associated with the construction and use of the temporary project access road would be limited to the initial nine-month construction period for the project. See Appendix B of the Final EIR/EIS for the analysis and calculations of the de minimis air emissions associated with the construction and use of the temporary access road. Construction of the power line would also result in only de minimus emissions from the one-time installation of approximately one-fourth mile of power line.

3. As detailed in Appendix B of this Final EIR/EIS, the pollutant emissions associated with activities on federal right-of-way easements would not exceed de minimus levels, and the proposed action would therefore, conform to the requirements of the Final Rule for the Federal Clean Air Act.

Response S-03-4

1. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMDs Air Quality Attainment Plan related to attainment of emission reductions for ozone precursors.

2. As noted in Chapter 2.0 of this Final EIR/EIS, Document 003, Response 6, the estimate of combined NO_x and ROG project emissions at full development in the year 2010 is 1.7 tons/day, representing an increase in the current planning inventory baseline of 0.6 percent. To the extent that these emissions are not offset or mitigated in attainment plans adopted by the MDAQMD, these emissions could delay attainment of ozone standards.

3. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response S-03-5

1. As further described in Chapter 2.0 of this Final EIR/EIS, (Document 003, Response 5) the

proposed landfill potentially affects three federally designated nonattainment areas:

- South Coast Air Basin - Ozone, CO, NO_2, and PM_{10} Nonattainment Areas
- SEDAB Ozone Nonattainment Area
- The San Bernardino County PM_{10} Nonattainment Area (as designated in December 1993)

Response S-03-6

1. Comment noted. Section 5.4 of the Supplement identifies the physical air quality impacts to the SEDAB as significant and unavoidable as they relate to MDAQMD's Air Quality Containment Plan. The status of the proposed project in relation to the Air Quality Management Plan is not a physical impact, and the physical impact is already listed as significant and unavoidable, therefore, there is no requirement to add an additional significant unavoidable impact as suggested by this comment.

2. As discussed in Response S-03-4, through the permitting and offset requirements of MDAQMD's New Source Review Regulation XIII, the proposed action will be required to demonstrate conformance with the MDAQMD's attainment plan.

Response S-03-7

1. As described in Chapter 2.0 of this Final EIR/EIS, (Document 003, Response 9), a revised New Source Review regulation is currently being drafted by the MDAQMD. Rail•Cycle would comply with the requirements of the rule in effect at the time a permit is required to construct the landfill gas flare system.

Response S-03-8

1. BLM's Record of Decision for the EIR/EIS will include a statement that the mitigation measures in the Final EIR/EIS will be implemented. The Mitigation Monitoring and Compliance Program required by Section 21081.6 of the California Public Resources Code for CEQA has been prepared and will be adopted by the County Board of Supervisors. The Mitigation Monitoring and Compliance Plan will assure that the mitigation measures included in the EIR/EIS are implemented.

Response S-03-9

1. As described in Chapter 2.0 of this Final EIR/EIS (Document 003, Response 12), screened intervals for future wells would be determined at the time of installation and would be 5 feet above the highest known ground water level and 20 feet below the lowest projected ground water fluctuation.

Response S-03-10

1. As described in Chapter 2.0 of this Final EIR/EIS (Document 003, Response 14), background water quality for the proposed landfill would be based on data obtained from upgradient wells operating over the life of the landfill, and from point of compliance wells during the one-year minimum period during which each is monitored before landfilling begins upgradient of the well.

Response S-03-11

1. As described in Chapter 2.0 of this Final EIR/EIS (Document 003, Response 15), based on a detailed analysis of the regulatory definition of waters of the United States, it was concluded that Chambless Wash is not a part of a tributary system to waters of the United States (LSA, 1992). As noted in Section 4.4.1.2.1 of the Draft EIR/EIS, the COE has concurred with the finding and has determined that a Section 404 permit is not necessary for the proposed action (a copy of the COE's letter was included as Appendix E of the Draft EIR/EIS).

Response S-03-12

1. As described in Chapter 2.0 of this Final EIR/EIS (Document 003, Response 19), if disposed in a lined evaporation pond, liquids and the evaporate (sludge) would be analyzed in accordance with RCRA Subtitle C and California Health and Safety Code Title 22 procedures. If the sludge is determined to be hazardous, the material would be handled, transported and disposed at an approved disposal facility or other approved hazardous waste treatment facility.

Response S-03-13

1. The three sections of offered lands that would be exchanged as part of the proposed action were selected by BLM primarily on the basis of their wildlife habitat values particularly for the desert tortoise. (Also see Chapter 2.0 of this Final EIR/EIS, Document 003, Response 22).

Response S-03-14

1. As described in Chapter 2.0 of this Final EIR/EIS (Document 003, Response 23), the proposed action would have no impact on the lands recommended for protection under the proposed California Desert Protection Act. The closest areas to the project site being proposed for protection are the Marble Mountains Wilderness Area (four miles to the north) and Sheephole/Cadiz Wilderness (four miles to the south). This determination is based on the proposed project's potential environmental impacts as detailed in the Draft EIR/EIS and Supplement.

S-04

DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2711
LOS ANGELES, CALIFORNIA 90053-2325

February 11, 1994

MAR 1994
RECEIVED
BY

REPLY TO
ATTENTION OF:
Office of the Chief
Operations Branch

County of San Bernardino Planning Department
Attn: Mr. Randy Scott
385 North Arrowhead, 3rd Floor
San Bernardino, California 91425

Gentlemen:

This letter regards the supplement to the draft EIR/EIS of December 1993 for the proposed Rail Cycle Bolo Station Landfill. The document requested that written comments be mailed to your office no later than February 21, 1994; below are our comments.

The work "landfill" may be a misnomer as used here since this proposal calls for the creation of a refuse mountain, to be placed well above ground level. Landfill implies a filling of a cavity, of sorts. A more appropriate word should be used. ①

The need for the project is not accurately presented. The need should be addressed in light of the proposed Eagle Mountain landfill--which would not build a mountain of refuse but fill a large abandoned mine cavity, as a true landfill would. The Eagle Mountain proposal will likely be approved in the near future, thus greatly reducing the need for your proposed project. The Eagle Mountain project would be much less aesthetically and ecologically offensive, and would not result in the loss of desert habitat. ②

Although we all know that California needs more space for refuse disposal, there is still time to wait and see what occurs with the Eagle Mountain proposal. If, after a reasonable number of years that project cannot be approved, then your project should move forward for approval.

The County has made significant strides regarding environmental conservation, while still providing professional services to its citizens. Please continue to move upward along this pathway by re-evaluating the need for this project. If you have any questions, call Mr. Mark Durham at (213) 894-6423.

Sincerely,

Charles S. Dwyer

fr Carl F. Enson, P.E.
Chief, Construction
Operations Division

DOCUMENT S-04
DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
RESPONSE TO COMMENTS

Response S-04-1

1. Although the commenter's definition of the word landfill may be "filling of a cavity", the definition of the term is: "A system of trash and garbage disposal in which the waste is buried between layers of earth to build up low-lying land" (Webster's Ninth New Collegiate Dictionary, 1986). The proposed Bolo Station Landfill, as well as numerous existing landfills (Corona, BKK, Spadra, etc.) are consistent with this definition, and are not canyon or other cavity fills.

Response S-04-2

1. The need for the proposed action is discussed in detail in Chapter 2.0 of both the Draft EIR/EIS and the Supplement. As stated in Chapter 6.0 of the Draft EIR/EIS and Chapter 6.0 of the Supplement, the proposed Eagle Mountain landfill is considered a cumulative project and not an alternative to the proposed action. Rail•Cycle-Bolo Station Landfill and the Eagle Mountain Landfill are similar private projects that are proposed to meet a portion of the long-term waste disposal requirements for southern California. As discussed in Chapter 2.0 of the Supplement, the anticipated short-fall in landfill capacity projected for southern California indicates that one or more large regional landfills, such as the proposed Bolo Station or Eagle Mountain landfills, may be required.

S-05

United States Department of the Interior

GEOLOGICAL SURVEY
Reston, VA 22092

RECEIVED
94 MAR -7 AM 11: 14

In Reply Refer To:
Mail Stop 423
DES 94/0000
USGS 940179

FEB 28 1994

MEMORANDUM

To: Doug Romoli, Planning Environmental Coordinator
Bureau of Land Management

From: James F. Devine
Assistant Director for Engineering Geology

Subject: Rail•Cycle - Bolo Station Landfill
Amboy, California, County of San Bernardino; U.S. Bureau of Land Management Supplement to Draft Environmental Impact Report/Statement (December 1993) and Draft Environmental Impact Report/Statement (November 1992)

We have reviewed the subject documents and offer the following comments:

The total dissolved solids concentration contours given in figure 4.2.2 (p. 4.2-4) of the Supplement do not seem to accommodate the individual values indicated. The figure should be redone, giving particular consideration to the location of the 3,000 mg/L contour. ① Figure 5.2.2 (p. 5.2-7) of the Supplement shows the proposed point of compliance wells upgradient of the leachate evaporation pond and the sedimentation basins. Additional wells should be located downgradient of the pond and sedimentation basins to allow determination of contamination sources (if any). ②

It appears that Rail•Cycle must obtain approval to use synthetic materials in place of a soil layer during daily cover operation (Draft Environmental Statement [DES]; p. 3-31, 4.0) as well as a flexible membrane in the final cover in lieu of a 1.5 ft. clay layer (Supplement DES; p. 3-11, 2.0, 3.0). If approvals are not obtained, and the soil and clay layers are utilized, the Final Environmental Statement (FES) should address potential wind erosion effects on these layers and proposed mitigation to ensure landfill integrity. ③

The DES indicates there is no evidence of an ordinary high water mark in the Chambless Wash (p. 4.4-9, 6.0 of the DES), but there is no discussion of any scour processes. A small area of the site could be impacted should high flows occur in this wash. This risk, and any associated mitigation, should be discussed in the FES. ④

Although seismic studies show no evidence of active faulting at the landfill site, it is known from the Landers earthquake that significant earthquakes are possible in the Mojave Desert, even where fault activity had not previously been recognized. Estimates of hazards from earthquakes and fault rupture should take this into account and be considered in discussion of alternatives. ⑤

Copy to: H. Wilshire

DOCUMENT S-05
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
RESPONSE TO COMMENTS

Response S-05-1

1. As this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required. Corrections to Figure 4.2.2 have been made as noted in this comment. The revised figure is included in Chapter 1.0 of this Final EIR/EIS and replaces the figure in the Supplement.

Response S-05-2

1. The ground water Detection Monitoring Program would conform to Subtitle D and CCR Title 23, and the requirements of the RWQCB. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the leachate evaporation pond would be lined. Because the leachate ponds are evaporation ponds, in the event of a liner failure, the liner could be easily repaired and, if necessary, remediation of the subsurface soil accomplished. The proposed action has been refined since distribution of the Supplement to include lysimeters beneath the leachate collection sumps to verify the integrity of the liquid containment.

2. Since the sedimentation ponds would only collect surface runoff that does not have the potential to come in contact with waste, there is no need to include monitoring downgradient from these ponds.

Response S-05-3

1. Bolo Station is located in an area that experiences lower velocity winds than various other areas in which landfills are operated without issues associated with wind erosion of daily cover or final cover. For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County, California (data from January through December 1991) is provided below:

PERCENTAGE OF HOURLY OBSERVED WIND SPEEDS

Wind Speed Higher Than:	Bolo Station	Altamont
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

The Altamont Landfill is located in an area of relatively constant wind velocity that has attracted wind powered electrical generating facilities. According to WMNA, this landfill is operated without problems associated with the wind erosion of cover material.

2. As included in Section 5.7.5 of the Draft EIR/EIS, several mitigation measures would be implemented to reduce potential wind erosion at the site. Measures to minimize wind erosion within the landfill footprint include:

   - Chemical binding agents shall be applied to cover stockpiles to minimize wind erosion emissions.
   - Completed landfill cells shall be revegetated to minimize wind erosion emissions.

These measures would be implemented whether or not the synthetic materials are approved in place of a soil layer (daily cover) or clay layer (final cover).

Response S-05-4

1. Landfill development would occur on a 45- to 60-acre cell-by-cell basis throughout the life of the proposed landfill. Landfill development in the area of Chambless Wash, primarily located in the western half of Section 22, is not projected to occur for 25 to 30 years after project startup. Consistent with requirements of the County Land Development Department, the following mitigation measure has been included in this Final EIR/EIS (see Table S.2) to mitigate the potential impacts should high velocity flows occur in the Chambless Wash:

   - In consultation with the County Land Development Department, Rail•Cycle shall monitor and map drainage flows in the affected area of Chambless Wash. Based on this monitoring and in consultation with the County Land Development Department, protective measures, if any, would be identified prior to developing this portion of the site.

Response S-05-5

1. A summary overview of faulting in the vicinity of the Bolo Station site is provided in Appendix E,

Table E.2 of this Final EIR/EIS. As summarized in this table, the Ludlow Fault, located approximately 15 miles from the Bolo Station site, represents the closest potentially active fault. The overview supports the findings of the Draft EIR/EIS and Supplement, which concluded that an earthquake located on the Ludlow Fault would yield the largest peak horizontal ground acceleration during the maximum probable earthquake (MPE) and maximum credible earthquake (MCE) events at the site (i.e., 0.09 g and 0.20 g, respectively). Further, the stability analysis report by Rust indicates that a theoretical 0.35 g acceleration would not cause instability or unacceptable deformations of landfill elements (Rust, 1993d). As discussed in the Draft EIR/EIS, the Ludlow Fault is also the closest potentially active fault to the Cadiz Valley alternative site. At a distance of 26 miles from this site, it could generate a maximum acceleration of 0.05 g at the Cadiz Valley site.

SECTION 3.2

STATE/REGIONAL AGENCIES COMMENTS AND RESPONSES

S-06

STATE OF CALIFORNIA PETE WILSON, *Governor*

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO, CA 95814

February 7, 1994

RANDY SCOTT
SAN BERNARDINO COUNTY PLANNING
385 NORTH ARROWHEAD AVENUE
THIRD FLOOR
SAN BERNARDINO, CA 92415-0182

Subject: RAIL-CYCLE SCH #: 91092020

Dear RANDY SCOTT:

The State Clearinghouse has submitted the above named draft Environmental Impact Report (EIR) to selected state agencies for review. The review period is now closed and the comments from the responding agency(ies) is(are) enclosed. On the enclosed Notice of Completion form you will note that the Clearinghouse has checked the agencies that have commented. Please review the Notice of Completion to ensure that your comment package is complete. If the comment package is not in order, please notify the State Clearinghouse immediately. Remember to refer to the project's eight-digit State Clearinghouse number so that we may respond promptly.

Please note that Section 21104 of the California Public Resources Code required that:

> "a responsible agency or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency." ①

Commenting agencies are also required by this section to support their comments with specific documentation.

These comments are forwarded for your use in preparing your final EIR. Should you need more information or clarification, we recommend that you contact the commenting agency(ies).

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact Lemos Mari at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Michael Chiriatti, Jr.
Chief, State Clearinghouse

Enclosures
cc: Resources Agency

DOCUMENT S-06
GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
RESPONSE TO COMMENTS

Response S-06-1

1. No specific response required. Copies of the State agency letters received regarding the Supplement and responses to the comments are included in this Final EIR/EIS.

S-07

STATE OF CALIFORNIA
PETE WILSON, *Governor*

STATE LANDS COMMISSION
LEO T. McCARTHY, *Lieutenant Governor*
GRAY DAVIS, *Controller*
THOMAS W. HAYES, *Director of Finance*

EXECUTIVE OFFICE
1807 - 13th Street
Sacramento, CA 95814

CHARLES WARREN
Executive Officer

January 20, 1994

File Ref.: 40687
SD 92-12-07.4

Mr. William G. Shafroth
Assistant Secretary
The Resources Agency
1416 Ninth Street
Sacramento, CA 95814
Attention: Nadell Gayou

Mr. Randy Scott
San Bernardino County
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0182

Dear Mr. Shafroth and Mr. Scott:

Staff of the State Lands Commission (SLC) has reviewed the Supplement to the Draft Environmental Impact Report/Environmental Impact Statement (SDEIR/S) for the Rail-Cycle - Bolo Station Landfill, SCH #91092020. Based on this review, we offer the following comments.

As stated in our previous letter in response to the Draft Environmental Impact Report/Statement, the project involves Section 16, T5N, R13E, SBM, consisting of 14.70 acres of State-owned School Lands subject to a railroad right-of-way and 625.30 acres of State patented School Lands where the State has reserved 100% of the mineral interests. Both the fee parcel and the reserved mineral interests are under the jurisdiction of the SLC. The SLC is negotiating with Rail-Cycle concerning impacts to these minerals and their use as cover material. ①

If you have any questions regarding the SLC's interests within the proposed project, please contact Alex Gonzalez at (310) 590-5220.

Sincerely,

Mary Griggs

MARY GRIGGS
Environmental Review Section
Division of Environmental
Planning and Management

cc: Dwight E. Sanders
Al Willard
Alex Gonzalez
OPR

DOCUMENT S-07
STATE LANDS COMMISSION
RESPONSE TO COMMENTS

Response S-07-1

1. Comment acknowledged. See Chapter 2.0 of this Final EIR/EIS, Document 008, Response 1 for a response to the agency's comment on the Draft EIR/EIS.

State of California

California Environmental
Protection Agency

Memorandum

February 22, 1994

To:
Mark Goss
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

Randy Scott
San Bernardino County
Planning Department
385 N. Arrowhead Avenue
San Bernardino, CA 92415-0182

From:
Doug Okumura, Deputy Director
Permitting & Enforcement Division
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

L. Van Kekerix
Lorraine Van Kekerix, Manager
Plan Implementation Branch
Governmental & Regulatory Affairs Division
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: SCH #91092020 - Supplement to the Draft Environmental Impact Report/Environmental Impact Statement (SEIR/EIS) for the construction and operation of the Rail•Cycle - Bolo Station Landfill (BSL), requiring issuance of a Solid Waste Facilities Permit (SWFP), San Bernardino County.

California Integrated Waste Management Board (Board) staff have reviewed the SEIR/EIS for the project cited above. The Board has two complementary mandates: to ensure that solid waste facilities are designed and operated in an environmentally sound manner which protects human health and the environment in accordance with applicable laws [Public Resources Code (PRC) Section 40052]; to oversee local jurisdictions achievement of the waste diversion mandates of 25% by 1995 and 50% by 2000 (PRC Sections 40001, 40051, and 41780); and that local jurisdictions project 15-years of waste disposal capacity (PRC Sections 41260 and 41460). In keeping with the complementary mandates, Board staff from both the Permitting & Enforcement Division, and the Governmental & Regulatory Affairs Division prepared comments included in this document. Please address the comments, found after the project description, in the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS).

Project Description

The County of San Bernardino Planning Department (SBCPD) coordinated with the Bureau of Land Management (BLM) in the preparation of a Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) and the proposed SEIR/EIS for the project cited above. BLM is actively involved in the proposed project because the proposed action includes the exchange of federal lands managed by BLM, an amendment of the California Desert Conservation Area Plan, and right-of-ways across federal lands. The project would also consist of a General Plan Amendment and issuance of a Conditional Use Permit through the County of San Bernardino. SBCPD is the Lead Agency in preparing the DEIR/EIS and the SEIR/EIS with the BLM conducting the public scoping meetings in connection with the preparation of the EIS pursuant to the National Environmental Policy Act (NEPA).

The proposed action is a private venture between Atchison, Topeka, and Santa Fe Railway Company, Inc. (ATSF) and Waste Management of North America, Inc. (WMNA) involving construction and operation of a rail-served Class III non-hazardous waste landfill complex that would accommodate the disposal of up to 21,000 tons per day (tpd) of municipal solid waste (MSW) at full operation after approximately five years. Initially, the proposed project would accept 3,000 tpd, of MSW from rail and local haulers.

The following description is the proposal analyzed in the DEIR/EIS:

> The proposed facility would be located on 4,800 acres (3,200 acres are owned by ATSF) in the Mojave Desert between the communities of Amboy and Cadiz directly adjacent to Bristol Dry Lake and Leslie Salt in Sections 5, 8, 9, 15, 16, 17, 21, and the west half of Section 22 in Township 5 North, Range 13 East, San Bernardino Baseline and Meridian. The proposed facility will be open 24 hours per day, seven days per week, for 358 days during the year.
>
> The proposed facility would have a landfill footprint constructed in a "T" shape consisting of 2,100 acres and would have an anticipated life expectancy of between 60 to 100 years. The estimated conceptual capacity of the proposed landfill is approximately 821 million cubic yards (mcy), of this total, the waste volume is projected to be 717 mcy or 430 million tons of MSW. The central portion of the landfill will be elevated from approximately 370 to 380 feet above the surrounding natural terrain. Excavation depth will vary across the landfill site in order to achieve and maintain a minimum separation of 5 feet between the base

of the landfill liner and the highest anticipated zone of capillary rise above ground water level. The landfill "footprint" design includes division of the 3.3-square mile surface area into 46 landfill cells along a north-south grid. Each landfill cell will be excavated at a 3:1 (horizontal to vertical) cut slope. The landfill cells will be filled with compacted waste placed in lifts ranging from 15 to 20 feet thick. Each cell will be sequentially prepared and filled with its optimum waste and cover. The working face is expected to be approximately 300 feet wide for the 3,000 tpd operation, and would increase over time in relationship to the daily volume of waste deposited to approximately 600 feet wide at the 21,000 tpd operation. The maximum side slope at the landfill edges will be 3:1. The project proponent proposes to use performance standards to conserve cover material at the proposed landfill.

Waste would be transported by rail from various materials recovery facilities (MRFs), located in cities and/or counties in southern California, within sealed 40- to 45-foot containers (using existing rail lines) to the proposed BSL. Each train will carry approximately 3,000 tons of compacted MSW in intermodal-type containers. Typically 100 to 120 containers, each carrying approximately 25 to 30 tons of waste, will be loaded on a conventional double-stack, approximately 4,000-foot long train. The maximum disposal rate of 21,000 tpd is expected within five to seven years when seven MRFs are included within the system, each requiring a single train to the landfill daily; up to seven inbound trains.

Issues identified through the scoping process and evaluated in the DEIR/EIS include geology and soils, mineral resources, surface hydrology and ground water, vegetation, wildlife, air quality, public health and safety, visual resources, cultural and paleontological resources, transportation, noise, land use, and socioeconomics. However, with implementation of the mitigation measures identified in the DEIR/EIS, the following impacts would remain significant and unavoidable even after mitigation:

- Ground water supply
- Air quality
- Visual Resources
- Land use
- Socioeconomics

The DEIR/EIS analyzes the environmental consequences of the proposed action as well as the consequences of the reasonable and feasible alternatives to the proposed action. The level of environmental analysis is to allow the public, responsible and reviewing agencies, and decision-makers sufficient information to

make an informed decision on the proposed action and its alternatives. Alternatives to the proposed project include:

- Cadiz Valley
- Reduced Action
- No Action

The following description is the revisions to the proposal, analyzed in the DEIR/EIS, which were analyzed in the SEIR/EIS:

> Since the circulation of the DEIR/EIS, revised or clarified information was developed to respond to comments on the DEIR/EIS regarding several issues. The issue areas for which revised or clarified information were developed include:
>
> - Purpose and need for the proposed action
> - Changes to the description of the proposed action since the distribution of the DEIR/EIS
> - Geology and soils
> - Surface hydrology and ground water
> - Mineral resources
> - Air quality
> - Noise
>
> To respond to these issues regarding potential environmental effects of the proposed action that were not proposed nor fully analyzed in the DEIR/EIS; the SBCPD and BLM decided that a SEIR/EIS would be prepared to address minor additions or changes in the proposed action in order to make the previous DEIR/EIS adequate. The specific changes from those proposed in the DEIR/EIS include the following:
>
> - Refine the design of the landfill's footprint and elimination of one cell. The southwest corner of the landfill has been reconfigured to remove the majority of the landfill cells from the 100-year floodplain. Engineered berms would be constructed on the perimeter of the landfill adjacent to Landfill Cells Nos. 11, 12, and 18 to protect the small portion of these cells that are still within the 100-year floodplain.

- Design refinements to the on-site landfill control systems including the: landfill liner; leachate collection system; surface water run-on controls; landfill runoff controls; and landfill gas control system. The landfill liner system would be upgraded to a double composite containment system with vadose zone gas monitoring.
- Design refinements to the final cover to improve the revegetation of the landfill form with native species.
- Increase in the site's acreage of 70 acres in a portion of Section 33 to 4,870 acres total.
- Elimination of access right-of-way across federal lands and construction of direct access to Route 66 across the 70 acres of Section 33.
- Construction of a new County Fire/Paramedic/ Sheriff Station at the entrance to the proposed landfill that would be manned 24-hours per day.
- Relocation of the proposed water wells from the northeast corner of Section 9 to the southeast corner of Section 33 immediately south of Route 66.
- Reduce the size of the aboveground water storage tank from 600,000 gallons to 500,000 gallons with a continuous reserve of 180,000 gallons.
- Increase in the proposed on-site water usage of 250 acre-feet to 300 acre-feet for the initial construction period. Increase in the proposed on-site water usage at full operation of 50 acre-feet to 130 acre-feet annually.
- Relocation of the proposed administrative/ visitor's center, public waste dropoff facility, and the reconfiguration of the operations and maintenance area.

PERMITTING & ENFORCEMENT DIVISION CONCERNS

Following is a list of some of the concerns of Permitting & Enforcement Division staff that were either not included, not assessed, or not fully described in the DEIR/EIS nor the SEIR/EIS which should be addressed in the FEIR/EIS:

State & Federal Regulations

California became an approved state under the Resource Conservation and Recovery Act, Subtitle D, in 40 Code of Federal Regulations (CFR), Part 258 (Subtitle D), for municipal solid waste landfills on October 7, 1993. Title 14 of the California Code of Regulations (CCR), Section 17258.21(a); as a result of Subtitle D, requires that "...municipal solid waste landfill units must cover disposed solid waste with six inches of earthen material at the end of each operating day...". 14 CCR 17258.21(b) states that "Alternative materials of an alternative thickness (other than at least six inches of earthen material) may be approved by the board...".

The DEIR/EIS proposes to use 'performance standards' to conserve cover materials at the proposed landfill site. Subtitle D changes no longer allow this except under extreme weather conditions 14 CCR 17258.21(c). Page 3-7 of the SEIR/EIS states that "suitable clay materials...and gravel for the drainage layer are not available on-site." Section 5.8.1.1.5.6 of the DEIR/EIS states that "The working face would not be left unexposed overnight and would be further restricted during high winds." Daily cover material has been proposed as mitigation in the DEIR/EIS for several potential impacts such as nuisance controls in Section 5.8.5. What is the calculated estimate for existing soil materials at the BSL site that could be used for daily and intermediate cover operations after construction of the landfill's base liner? ①

Analysis provided in Section 5.12 of the DEIR/EIS states that "Approximately 250,000 cubic yards of clay would be required every one to two years. This amount of clay would require an additional 80 trucks per day to enter the site over a six-month period, six days per week." If importation of greater than 250,000 cubic yards (cy) of soil and/or gravel material in any given year is required for the proposed project during a six-month period within that year, further California Environmental Quality Act (CEQA) compliance and documentation would be required for approval. ②

Daily Cover Availability

As stated in the previous section, the DEIR/EIS and SEIR/EIS do not indicate the amount of soil cover material shortfall for facility operations. If a shortfall of daily cover material should occur at the facility, how does the project proponent intend to address this possibility? ③

CIWMB staff requests that the FEIR/EIS address the potential for a cover material shortfall, identify the calculations for such a shortfall, and indicate how the project will comply with 14 CCR 17258.21(a).

Composting

Figure 3.1 shows a "Potential Future Composting Facility". If composting is proposed at the BSL site, further CEQA compliance and documentation would be required for approval. ④

Significant Unavoidable Environmental Impacts

The SEIR/EIS identified significant unavoidable environmental effects which cannot be mitigated or avoided upon implementation of the proposed project pertaining to ground water supply in overdraft, air quality cumulative impacts exceeding the state's ambient air quality standard, visual quality as a result of permanent alteration of the natural topography, modification of the rural land "limited use" character, and socioeconomics due to consumption of local land and water resources. ⑤

Pursuant to CEQA Guidelines, Article 7, Section 15091(a), the FEIR/EIS should identify that certification of the SEIR/EIS will include a Statement of Overriding Considerations for each significant unavoidable environmental impact identified with the project.

Mitigation Reporting or Monitoring Program (MRMP)

As required by Public Resources Code Section 21081.6, the Lead Agency should submit a MRMP at the time of local certification of the FEIR/EIS. This should identify the impacts associated with the proposed project, identify mitigation measures to reduce impacts to a less than significant level, identify agencies responsible for ensuring the implementation of the proposed mitigation, and identify a monitoring/tracking mechanism. ⑥

GOVERNMENTAL & REGULATORY AFFAIRS DIVISION CONCERNS

Following are the concerns of Governmental & Regulatory Affairs Division staff that were either not included or not fully described in the DEIR/EIS nor the SEIR/EIS which should be addressed in the FEIR/EIS. ⑦

According to the SEIR/EIS, "Responses to comments submitted on the DEIR/EIS, and any additional comments submitted on the material contained in this supplement, will be included in the FEIR/EIS for the proposed action". Some of the staff comments on the DEIR/EIS were addressed by the SEIR/EIS. It is unclear which of the comments on the DEIR/EIS were to be addressed in the SEIR/EIS, and which comments will be addressed in the FEIR/EIS.

__Potential Impacts on Local and Regional Solid Waste Plans and Achievement of Diversion Mandates__

As stated in the introduction, local jurisdictions are required by law to achieve the waste diversion mandates of 25% by 1995 and 50% by 2000 (PRC Sections 40001, 40051, and 41780); and to project 15 years of waste disposal capacity (PRC Sections 41260 and 41460). The 821 million cubic yards of landfill capacity would assist jurisdictions to achieve 15 years of disposal capacity, so disposal capacity will not be addressed below.

CEQA Guidelines Section 15125(b) and (c) requires that an EIR include a discussion of whether a project may be inconsistent with local and regional plans, such as Source Reduction and Recycling Elements (SRREs), and/or County or Region Integrated Waste Management Plans (CIWMPs). The diversion programs selected by local jurisdictions must be consistent with the waste management hierarchy (in order of priority): (1) source reduction; (2) recycling and composting; (3) and environmentally safe transformation and safe land disposal (PRC 40051). In addition, local jurisdictions are to maximize the use of all feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. ⑧

The SEIR/EIS contains additional information on the need for more disposal capacity, regulatory efforts to reduce solid waste generation, local practices involving disposal and diversion, and regional solid waste disposal needs. The specific effects of this rail-haul system/regional landfill on the achievement of the diversion mandates, and on the ability of jurisdictions to divert materials from disposal have not been addressed.

Please include a discussion of consistency with SRREs and CIWMPs in the FEIR/EIS and address potential impacts on achieving the diversion mandates. Please clarify whether the DEIR/EIS recovery rates, which range from approximately 13% to 38% depending on the types of waste generated by the jurisdiction, are still valid for the FEIR/EIS and discuss potential impacts on local jurisdictions' ability to meet the mandated diversion goals. ⑧ CONT.

Materials Recovery Facilities

The project description in the DEIR/EIS and SEIR/EIS does not include the impacts of the MRFs (up to 7) which are required "to support the Rail-Cycle system" and are an "important component" (p. 1-5, DEIR/EIS), and treats the MRFs as separate from the Bolo Station Landfill project. These MRFs are the source of the waste to be transported to and disposed at the Bolo Station landfill. ⑨

If MRFs are not considered to be part of the project, then please address the cumulative impacts of the MRFs on the implementation of the solid waste planning documents and achievement of the diversion mandates.

"Whole Project"

The seven MRFs have not been addressed so the impacts of the whole project have not been fully addressed as required by CEQA Guidelines Sections 15378 and 15165. If the MRFs are needed "to support the Rail-Cycle System", then construction of the project as defined in the SEIR/EIS could limit the options of decision makers when the MRFs are considered later and not allow the public to have a meaningful assessment of the actual project (CEQA Guidelines Section 15002). ⑩

It is unclear who will own or operate the MRFs. Since mitigation measures for the Bolo Station project include activities at the MRFs (restrictions on wastes accepted, load inspections, and other procedures/training, DEIR/EIS page 1-18), there appears to be some control and/or linkage between the Bolo Station project proponents and the necessary MRFs. ⑪

"Cumulative Impacts"

Even if the specific impacts associated with each MRF are the subject of subsequent environmental documents (as proposed in the SEIR/EIS), the general impacts associated with these MRFs should be included under cumulative impacts in the FEIR/EIS. CEQA Guidelines (Section 15355 (b), states "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and **reasonably foreseeable probable future projects** [emphasis added]." Specifically, please address the cumulative impacts of the MRFs (as a part of the Rail Cycle system) on the implementation of the solid waste planning documents and achievement of the diversion mandates in the FEIR/EIS. ⑫

The DEIR/EIS included a listing of "other areas tentatively being considered for siting of MRFs that could be supported by Rail-Cycle" (page 3-4). The list included Santa Clarita Valley, Pomona Valley, San Gabriel Valley, San Bernardino Valley, and the high desert area of San Bernardino County. The SEIR/EIS did not include any information on MRF locations. Please clarify whether the tentative list in the DEIR/EIS is still valid, and if not indicate any changes. ⑬

The SEIR/EIS includes the following statement, "Potential cumulative impacts related to future MRFs in the urban areas of southern California would be appropriately addressed in site-specific CEQA documentation for each MRF". Staff look forward to reviewing the future, specific CEQA documentation for each MRF. The CEQA documentation for each MRF should address: the impacts on the implementation of local and regional solid waste management plans; the impacts on the diversion activities and rates contained in those plans; and the cumulative impacts of all the other MRFs which are part of the Rail Cycle system. ⑭

Alternatives Analysis of Diversion Activities

According to the SEIR/EIS, a number of comments on the DEIR/EIS "requested information on an alternative to landfill disposal involving increased diversion of waste through source reduction and recycling". The SEIR/EIS reasserts the need for additional disposal capacity, discusses why transformation is not a feasible alternative and suggests that other diversion alternatives need not be considered, because the proposed action is "for use by cities and counties in southern California **after** [emphasis added] they have met their AB 939 mandated diversion ⑮ requirements" and "the Bolo Station Landfill would **only accept**[emphasis added] waste that has already undergone source reduction and recycling". Staff requests additional information be included in the FEIR/EIS explaining how these restrictions would be implemented. If these provisions are mitigation measures, please provide more detail in the FEIR/EIS. If the MRFs fail to divert material, are there contingency measures for other diversion activities? ⑮ CONT.

To summarize, staff of the Governmental & Regulatory Affairs Division believe that additional information on the effectiveness of the MRFs and the cumulative impacts associated with the MRFs needs to be included in all future environmental documents prepared for compliance with CEQA.

Thank you for the opportunity to review this document. If you have any questions regarding the project description or the Permitting & Enforcement Division comments, please contact John Loane at (916) 255-2654. If you have any questions regarding the Governmental & Regulatory Affairs Division comments, please contact Lorraine Van Kekerix at (916) 255-2670.

DOCUMENT S-08
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD
RESPONSE TO COMMENTS

Response S-08-1

1. This comments misinterpreted the discussion in Section 3.3.2.1.3 of the Draft EIR/EIS to mean that Rail•Cycle proposed to use "performance standards" to guide the use of daily cover. As discussed in the Draft EIR/EIS, Rail•Cycle would apply a 6-inch thick layer of daily cover or an equivalent alternative cover, if the alternative cover is allowed by the Solid Waste Facilities Permit issued for Bolo Station by the LEA with the concurrence of the CIWMB. Rail•Cycle would follow the procedures in CCR Title 14 for requesting the use of an alternative cover. If the use of an alternative cover at the landfill is not approved by the LEA and CIWMB, Rail•Cycle would apply a 6-inch thick layer of daily cover as required by CCR Title 14.

2. As noted in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, Rail•Cycle is proposing to use a geosynthetic clay liner (GCL) rather than low permeability clay in its double-composite liner system. Therefore, clay may not be required for the proposed project. However, for purposes of the EIR/EIS, and as stated in the Draft EIR/EIS and Supplement, if clay is required for the liner system, it is assumed that the clay would come from the Rheox Mine near Hector, California. While the Rheox Mine is identified as the assumed sources of clay, if Rail•Cycle requires clay it intends to procure clay through a competitive contract and other sources may be utilized. To be awarded a contract, the source would be required to be an approved mining/borrow area with appropriate permits and licenses.

3. As shown in Table 3.4 of the Draft EIR/EIS, Rail•Cycle estimates that the volumes of soil removed during the designed excavation of the proposed landfill would equal 104 million cubic yards. As shown in Table 3.3 of the Draft EIR/EIS, the volume of waste to be landfilled at Bolo Station is 717 million cubic yards. The ratio between waste and available cover material is 7:1 (717 ÷ 104 = 7). This is within the expected ratio of waste to cover achievable at a state-of-art landfill, such as that proposed by Rail•Cycle. Therefore, the proposed landfill is considered to have a balance between excavated soil and cover material.

Response S-08-2

1. As discussed in Response S-08-1, Rail•Cycle proposes to use a GCL rather than clay in its double composite liner. However, the County and BLM agree that, should the project require more than 250,000 cubic yards of imported clay during a six-month period (i.e., the amount of clay assumed in the air quality analysis for the EIR/EIS), additional CEQA and NEPA analysis would be required. A mitigation measure has been included in this Final EIR/EIS (see Table S.2) that would require additional CEQA and NEPA analysis should the project require more than 250,000 cubic yards of clay during any six-month period.

Response S-08-3

1. As noted in Response S-08-1 above, Table 3.4 of the Draft EIR/EIS, Rail•Cycle estimates that the volumes of soil removed during the designed excavation of the proposed landfill would equal 104 million cubic yards. As shown on Table 3.3 of the Draft EIR/EIS, the volume of waste to be landfilled at Bolo Station is 717 million cubic yards. The ratio between waste and available cover material is 7:1 (717 ÷ 104 = 7). This is within the expected ratio of waste to cover achievable at a state-of-art landfill such as that proposed by Rail•Cycle. Therefore, the proposed landfill is considered to have a balance between excavated soil and cover material based on analysis conducted for this EIR/EIS. Further verification of the balance between excavated soil and cover material may be required as part of the SWFP. If insufficient cover material is available, several options are available including reducing the site of the proposed landfill and importing suitable cover material. Importation of cover material may require additional CEQA/NEPA analysis.

Response S-08-4

1. As noted on Figure 3.1 of the Supplement, the potential location of a future composting facility is shown for informational purposes only. There are currently no plans by Rail•Cycle to construct and operated such a facility. The County agrees that, if in the future a composting facility is proposed at Bolo Station, a modification of the

Conditional Use Permit (CUP) for the landfill would be required. Such a modification would require the appropriate CEQA analysis.

Response S-08-5

1. As noted in Chapter 2.0 of this Final EIR/EIS, Document 011, Response 011-39, as the CEQA lead agency for the proposed action, the County Board of Supervisors will adopt statements of overriding considerations for those impacts of the proposed action that are defined as significant and unavoidable.

Response S-08-6

1. As noted in Chapter 2.0 of this Final EIR/EIS, Document 011, Response 011-40, as the CEQA lead agency for the proposed action and as required by Section 21081.6 of the California Public Resources Code, the County has prepare a Mitigation Monitoring and Compliance Program for the proposed action.

Response S-08-7

1. As noted in Section 1.1 of the Supplement, responses to comments submitted on the Draft EIR/EIS and on the Supplement are included in this Final EIR/EIS. Please refer to Chapter 2.0 of this Final EIR/EIS, Document 011 for responses to the comments submitted by the CIWMB on the Draft EIR/EIS.

Response S-08-8

1. Compliance with AB 939 requirements is the responsibility of local jurisdictions. Part of that compliance includes assuring 15 years of disposal capacity for solid waste that cannot otherwise be diverted through source reduction and recycling. As discussed in Chapter 2.0 of the Supplement, even with full implementation of the diversion requirements of AB 939, a need will exist for substantial amounts of additional landfill capacity to serve the communities of southern California. The proposed Bolo Station Landfill would meet part of that need by providing a disposal option for solid waste that cannot be diverted.

2. Waste transported to Bolo Station would consist of post-recycled residual waste reflecting the AB 939 diversion programs implemented by the cities and counties from which the waste originates. As compliance with the requirements of AB 939 rests solely with cities and counties, it is anticipated that the cities and counties that may use Bolo Station would be in compliance with AB 939 with or without the assistance of the network of MRFs that may be part of the Rail•Cycle system.

3. Private projects such as Rail•Cycle can assist cities and counties in meeting AB 939 through contracts that provide specific services or components within the jurisdictions implementation program. For example, a city contracting with a Rail•Cycle MRF for processing and disposal of waste may negotiate a certain level of recovery for specific waste stream components. Such a contract may make Rail•Cycle responsible for a portion of the city's AB 939 diversion requirement and allow the city to demonstrate the 15-year disposal capacity requirement of AB 939. However, such a contractual arrangement does not relieve the city from its ultimate responsibility for compliance with AB 939.

4. As an owner/operator of a private landfill, Rail•Cycle has no control over the AB 939 compliance of a city or county that disposes of its waste at Bolo Station. While it is reasonable to expect that the MRFs through which the waste is processed would assist cities and counties in complying with AB 939, there are many variables beyond the control of the MRF or landfill operator that would determine the success of a jurisdiction's AB 939 implementation program.

5. Rail•Cycle provides the following resources that can assist cities and counties in complying with AB 939:

   - Assured disposal capacity.
   - Waste processing and recycling facilities.
   - Information useful in developing and monitoring waste diversion programs.

   Information that Rail•Cycle can provide for waste from MRFs that it controls includes total incoming waste volume, recovered volumes by recycled commodity, and residual disposal volume. The type and detail of the information available would differ from MRF to MRF depending on the types of users and contractual requirements under which the waste is received.

6. The recyclable recovery rates noted in the Draft EIR/EIS are identified as typical for Rail•Cycle. As indicated in the Draft EIR/EIS, the rate of recyclable materials recovered at a specific MRF would be dependent on the composition of the waste stream, which is expected to vary by source and over time. The recovery rates noted in the Draft EIR/EIS are considered to represent typical values.

Response S-08-9

1. As noted in Chapter 2.0 of this Final EIR/EIS, Document 011, Response 011-44, the proposed action is comprised of a landfill and rail haul of solid waste. The project concept is based on the expectation that cities and counties would need to separate recyclable materials from the waste stream by source separation or through centralized locations, such as MRFs, prior to diversion of remaining waste to landfills to meet their AB 939 requirements. Rail•Cycle has proposed that waste that has undergone reduction be directed to the proposed Bolo Station Landfill via MRFs, which would be located along a rail line.

2. To enhance public understanding of how a MRF might serve the proposed action, a description of a typical MRF was provided in Section 3.2.2 of the Draft EIR/EIS. However, inclusion of this general description should not be construed to mean that construction and operation of MRFs is part of the proposed action. To date, only the MRF in the City of Commerce has been approved. Any effort on the part of the EIR/EIS to predict where additional MRFs could be located, and to try to assess those impacts, would be speculative and misleading. CEQA and NEPA do not require speculative analysis.

3. The EIR/EIS does evaluate impacts related to the transfer of solid waste by rail to the proposed landfill. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from up to seven MRFs to the proposed site were evaluated in the Draft EIR/EIS in Sections 5.7, 5.8, 5.12 and 5.13, respectively. Additional information regarding transportation and noise impacts along the rail haul route was included in Sections 5.4 and 5.5 of the Supplement. These impacts were addressed as part of the proposed action and not as cumulative impacts as suggested by this comment.

Response S-08-10

1. As discussed in Response S-08-9 above, this EIR/EIS identified that up to seven MRFs may be incorporated into the Rail•Cycle system. The EIR/EIS evaluate impacts related to the transfer of solid waste by rail to the proposed landfill. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs were evaluated in the Draft EIR/EIS in Sections 5.7, 5.8, 5.12 and 5.13, respectively. Additional information regarding transportation and noise impacts along the rail haul route was included in Sections 5.4 and 5.5 of the Supplement.

2. It is expected that the MRFs would be located in various jurisdictions throughout southern California. As separate CEQA analysis would be required to address site specific impacts from these MRFs, the CEQA lead agencies for these projects will independently review and consider the environmental impacts associated with the MRFs. It is unclear how this independent review by jurisdictions could limit the options of the decision makers for these jurisdictions as suggested by this comment.

3. As noted above, it would be speculative and misleading for this EIR/EIS to address the potential site specific environmental impacts associated with the construction and operation of undefined Rail•Cycle MRF locations. However, typical impacts that potentially could occur at a MRF located in southern California have been addressed in recent EIRs for two specific MRFs

   - City of Commerce MRF proposed by Rail•Cycle (David Evans and Associates, 1992).
   - West Valley MRF proposed by Kaiser/Burrtec in the City of Fontana (Chambers, 1993).

   The City of Commerce MRF is a Rail•Cycle project, whereas the Kaiser/Burrtec project is not affiliated with the project.

4. Based on the EIRs for the City of Commerce and West Valley MRFs, the following typical environmental impacts may occur from the construction and operation of other MRFs in southern California (David Evans and Associates, 1992; Chambers, 1993):

   - Onsite grading to prepare for the construction of structures, parking areas and roadways. It is anticipated that most MRFs would be located in existing industrial areas along existing rail lines. Therefore, natural landforms are not expected to be disturbed.
   - Southern California is subject to seismic activity and ground shaking. MRF structures would be required to conform to seismic standards included in the Uniform Building Code
   - The sites would be covered with impermeable surfaces (i.e., structures and paved areas) that, depending on the specific site, would result in additional storm water runoff. Liquids from materials processed

through the MRF and facility washdown water would be generated. Separate onsite surface water drainage and liquid/washdown water collection systems would be required to protect surface water quality.

- The MRFs would result in short-term (i.e., construction) and long-term (i.e., operation) air emissions in an air basin (South Coast Air Basin) that is nonattainment for certain criteria pollutants. This includes increased levels of CO at roadway intersections from vehicular idling. Air emissions could be significant on both a local and regional basis. Various mitigation measures will be required to reduce the air emission impacts to the maximum extent practicable.
- Depending on the specific site, the additional truck traffic associated with transporting waste to the MRF could impact local traffic and circulations. Roadway and intersection improvements to maintain an acceptable level of service (LOS) may be required.
- As it is expected that the majority of MRFs would be constructed in existing industrial areas near existing rail lines, land use impacts are not anticipated. Typical land use issues that would need to be addressed include, but are not limited to, zoning and General Plan land use designations, surrounding land uses, noise, odor, lighting, aesthetics, and public utilities and services. Local jurisdictions would be responsible for assuring that land use issues are adequately addressed and that appropriate conditions of approval are established for each MRF.

As noted above, the site-specific impacts for each MRF will be addressed in EIRs prepared by the local jurisdiction.

Response S-08-11

1. To date, of the potential MRFs that could transport waste to Bolo Station, only the MRF in the City of Commerce has been approved. Rail•Cycle continues to explore opportunities for MRFs in other areas of southern California that could transport waste to Bolo Station.

2. While Rail•Cycle intends to construct and operate MRFs in southern California, it is also possible that MRFs owned and operated by others (i.e., public and private MRFs) may contract with Rail•Cycle to dispose of their residual waste at Bolo Station. In this case, the mitigation measures in the EIR/EIS regarding operations at the MRFs would be implemented through contractual agreements between Rail•Cycle and the operators of the MRFs.

Response S-08-12

1. As discussed in Response S-08-9 above, the EIR/EIS evaluates impacts related to the transfer of solid waste by rail to the proposed landfill from potential MRFs. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs to the proposed site were evaluated in the Draft EIR/EIS (Section 5.7, 5.8, 5.12 and 5.13, respectively). Additional information regarding transportation and noise impacts along the rail-haul routes was included in Section 5.4 and 5.5 of the Supplement. These impacts are addressed as part of the proposed action and not as cumulative impacts as suggested by this comment.

Response S-08-13

1. The list included in the Draft EIR/EIS of other areas tentatively being considered for siting MRFs that could be supported by Rail•Cycle is still valid.

Response S-08-14

1. It will be the responsibility of the lead agencies for the CEQA documents for the MRFs to submit copies of these documents to the CIWMB. It will also be the responsibility of these lead agencies for these documents to determine the contents of the CEQA documents. The CIWMB, as a Responsible Agency, would have an opportunity for reviewing the CEQA documents for MRFs.

Response S-08-15

1. Waste transported to Bolo Station would consist of post-recycled residual waste reflecting the AB 939 diversion programs implemented by the cities and counties from which the waste originates. The portions of Section 3.3.3 of the Supplement quoted by this comment regarding use of Bolo Station by cities and counties that are in compliance with AB 939 was not intended to place restrictions on jurisdictions that may use the landfill. Compliance with the requirements of AB 939 rests solely with cities and counties, as verified by the CIWMB. It is anticipated that the cities and counties that may use Bolo Station would be in compliance with AB 939 with or without the assistance of the network of MRFs that may be part of the Rail•Cycle system.

2. Private projects such as Rail•Cycle can assist cities and counties in meeting AB 939 through contracts that provide specific services or components within the jurisdiction's implementation program. For example, a city contracting with a Rail•Cycle MRF for processing and disposal of waste may negotiate a certain level of recovery for specific waste stream components. Such a contract may make Rail•Cycle responsible for a portion of the city's AB 939 diversion requirement and allow the city to demonstrate the 15-year disposal capacity requirement of AB 939. However, such a contractual arrangement does not relieve the city from its ultimate responsibility for compliance with AB 939.

3. As an owner/operator of a private landfill, Rail•Cycle has no control over the AB 939 compliance of a city or county that disposes of its waste at Bolo Station. While it is reasonable to expect that the MRFs through which the waste is processed would assist cities and counties in complying with AB 939, there are many variables beyond the control of the MRF or landfill operator that would determine the success of a jurisdiction's AB 939 implementation program.

4. Rail•Cycle provides the following resources that can assist cities and counties in complying with AB 939:

   - Assured disposal capacity.
   - Waste processing and recycling facilities.
   - Information useful in developing and monitoring waste diversion programs.

   Information that Rail•Cycle can provide for waste from MRFs that it controls includes total incoming waste volume, recovered volumes by recycled commodity, and residual disposal volume. The type and detail of the information available would differ from MRF to MRF depending on the types of users and contractual requirements under which the waste is received.

5. In recognition of the needs of cities and counties for information from the MRFs that processes their waste to assist them in documenting compliance with AB 939, the following mitigation measure is incorporated in this EIR/EIS (see Table S.2):

   - Rail•Cycle shall make available to the appropriate LEA and the CIWMB information within its control regarding waste volumes and recovery rates at MRFs from which waste is disposed of at Bolo Station. To the extent that such information is available, reports will include the following for each MRF sending residual waste to Bolo Station:
     - Gross waste receipts.
     - Total volume of materials diverted for purposes of recycling, composting, or reuse by major commodity type (i.e., paper products, glass, plastic, metals and yard wastes).
     - Total volume of residual waste transported to Bolo Station.
     - Location of major end-markets for diverted materials.

   Information content, format and reporting frequency will be provided in a specific plan developed for each MRF in consultation with the operator of the MRF, the appropriate LEA, and the CIWMB.

SECTION 3.3

COUNTY/LOCAL AGENCIES COMMENTS AND RESPONSES

S-09

INTEROFFICE MEMO

COUNTY OF SAN BERNARDINO

DATE: **February 18, 1994** PVB *PHONE:* **4655**

FROM: **PAMELLA V. BENNETT, DIRECTOR** *MAIL CODE:* **0160**
Department of Environmental Health Services

TO: **RANDY SCOTT, SR. PLANNER**
Environmental Team, Planning Department

SUBJECT: **DEHS COMMENTS TO THE DRAFT EIR/EIS SUPPLEMENT FOR THE RAIL•CYCLE BOLO STATION LANDFILL PROPOSAL**

DEHS has found additional analysis within the subject document helpful in clarifying areas of DEHS' regulatory concern. Other details on the proposal continue to be provided to DEHS in the several technical documents required for a complete Solid Waste Facilities Permit application. ①

Thank you for this opportunity to comment. We look forward to continuing participation at the ERC tentatively scheduled for March 16, 1994 at 1:30 pm.

PVB:MS:cll

cc: Philip E. Smith, EMG - Special Project Coordinator
Joan Mulcare, EHS
Jim Trujillo, EHS
Paul Tavares, EHS
Mark Stevens, EHS

DOCUMENT S-09
SAN BERNARDINO COUNTY
INTEROFFICE MEMORANDUM
DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES
RESPONSE TO COMMENTS

Response S-09-1

1. No specific comments. Please refer to this commenter's letter on the Draft EIR/EIS and responses in Chapter 2.0 of this Final EIR/EIS, Document 029.

S-10

PLANNING DEPARTMENT
IMPERIAL COUNTY
PLANNING / BUILDING INSPECTION / PLANNING COMMISSION / A.L.U.C. / L.A.F.Co.
Jurg Heuberger – Director

February 18, 1994

Randy Scott
County of San Bernardino
Planning Department
385 North Arrowhead, Third Floor
San Bernardino, CA 91425-0182

Subject: Draft EIR/EIS Rail Cycle Bolo Station Landfill

Dear Mr. Scott,

The Planning/Building Department is in receipt of the Draft EIR/EIS for the Bolo Station Landfill project.

On Page 3-15, Table 3.2, regarding alternative landfill sites, one site is called "Niland" which under "the criteria column" list it as on a major highway. The proposed project in Niland is called the Chocolate Mountain Regional Landfill and was being proposed by Chambers Waste Systems, but has not been re-submitted at this time. Their application was rejected and the County has not received a re-submittal to this date. With regard to the criteria indicating that it was on a major highway, the proposed project is not located on a major highway. ①

On Page 3-17, Figure 3.5, the Mesquite Mine Project is located to the south of Highway 78, the Mesquite Mine Project is actually on the north side of Highway 78, at this time. ②

On Page 5.4-5, there is a discussion of calculated criteria pollutants and its impacts on the Southeast Desert Air Basin. It appears that in looking at the emissions of NOX and ROG, associated with the 21 ton per day scenario in the Southeast Desert Air Basin, emission increases are considered to be "significant". ③

On Page 5.4-11, Section 5.4.3.2 Off-Site Mitigation Measures, Paragraph 2, it discusses certain transportation control measures as mitigation measures in this Supplement. One mitigation proposed is the "Contribution to funding of public transportation or ride sharing systems for local communities in the SEDAB". Another transportation control measure is "contribution of funding of a program to retire older, high pollution vehicles in the SEDAB". Even with the off site mitigation measures as indentified above, it states in Section 5.4.3.3, "Significance after Mitigation", that the "Impacts on attainment of emission goals for SEDAB are reduced, but not eliminated by the revised baseline emissions estimates and the combined mitigation measures of the Draft EIR/EIS and the Supplement proposed for implementation". ④

939 MAIN STREET, EL CENTRO, CALIFORNIA, 92243-2856 (COURTHOUSE) (619) 339-4236
AN EQUAL OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER FAX NO. (619) 353-8338

S-10

Section 5.4.3.3, Second paragraph, under "Significance after Mitigation" indicates "As a result of the analyses documented in this section, this finding is revised to indicate that the Rail Cycle project would result in significant, unavoidable, adverse NOX emissions increases in the SEDAB". Besides the two off-site mitigation measures proposed, will there be any other off-sites provided in the South Coast Air Basin or the south east desert air basin areas for this significant impact of NOX on Imperial County?

It has been stated that based on further evaluation and consultation with other local agencies, appropriate transportation control measures would be adopted to further mitigate NOX emissions in the SEDAB area resulting from the Rail Cycle project operations. Please provide further input on "appropriate" transportation control measures to the Planning/Building Department and the Imperial County Air Pollution Control District for what would be deemed appropriate in Imperial County, besides the two off-site mitigation measures already discussed previously. ④ CONT.

Thank you for the opportunity to review the document. If you have any questions please contact this Office at (619)339-4236.

Sincerely,

JURG HEUBERGER, AICP
Planning Director

by: Richard Cabanilla
Richard Cabanilla
Planning Division Manager

cc: Jurg Heuberger, Planning Director
John Morrison, Assistant Planning Director
Bolo Station Landfill Project File
10.109

sm/RScott.

DOCUMENT S-10
IMPERIAL COUNTY PLANNING DEPARTMENT
RESPONSE TO COMMENTS

Response S-10-1

1. As discussed in Section 3.3.2.1 and Table 3.2 of the Supplement, the primary reason for eliminating the Niland alternative site from further consideration was the anticipated infeasibility of Rail•Cycle acquiring the site. As this comment does not alter the findings or conclusions of the EIR/EIS, the correction to Table 3.2 to specify that the Niland site is not on a major highway is included in Chapter 1.0 of this Final EIR/EIS.

Response S-10-2

1. As this comment does not alter the findings or conclusions of the EIR/EIS, no specific response is required. Correction to Figure 3.5 has been made as noted by this comment. The revised figure is included in the Summary to this Final EIR/EIS (see Figure S.6) and replaces the figure in the Supplement.

Response S-10-3

1. As acknowledged in Section 5.4.3.3 of the Supplement, based on SCAQMD significance thresholds, emissions of NO_X and ROG for the 21,000 tpd scenario in the SEDAB would be considered as an unavoidable adverse impact. As required by CEQA, the County Board of Supervisors will determine if the benefits of the proposed project outweigh the unavoidable adverse impacts. If the Board finds this to be the case, it will adopt a specific statement of overriding considerations.

Response S-10-4

1. As noted by the comment, Rail•Cycle will consult with local agencies regarding potential future measures to reduce NO_X. Potential future measures include region- and state-wide measures to reduce locomotive emissions. A recent study was conducted under contract to the California Air Resources Board (CARB) to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:

   - Retarding injection timing and other engine modifications.
   - Selective catalytic reduction (SCR).
   - Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
   - LNG combined with SCR.
   - Electrification.

Based on the proposed regulatory framework, allowable locomotive emissions per net ton-mile transported would be reduced by 80 percent between 1996 and 2003. As one of California's three major railroads, ATSF is actively participating in the efforts to develop strategies to reduce locomotive emissions.

Mojave
Water
Agency

February 18, 1994

County of San Bernardino
Planning Department
385 N. Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182
Attention: Mr. Randy Scott

Re: Draft Environmental Impact Report/Environmental Impact Statement Supplement for the Bolo Station Landfill proposed by the Rail-Cycle Corporation

Dear Mr. Scott:

In accordance with Mojave Water Agency Resolution No. 527-92, thank you for the opportunity to review the supplement for the Rail-Cycle project. As we stated in our letter of March 3, 1993, in commenting on the Draft Environmental Impact Report/Environmental Impact statement, the proposed project is outside the Agency boundaries, but its activities will have an effect on areas within the Agency's boundaries. The comments will deal with the project's impacts on water quality and quantity within the Agency area.

This document restates in *Section 1.4: Summary of Potential Environmental Consequences* that potential environmental effects of the proposed action could be reduced below a level of significance with the exception of four areas. The agency is specifically concerned about groundwater supply and the project's growth inducement characteristics.within the Agency area. Please see our letter of March 3, 1993, for specific comments and mitigation for these items in the draft EIR/EIS. ①

22450 Headquarters • P.O. Box 1089 • Apple Valley, CA 92307 • (619) 240-9201 • FAX (619) 240-2642

George R. Parker
Division #1
Carl N. Dalton
Division #2
Bill A. Christopher
Division #3
Peggy Sartor
Division #4
Thomas H. Irwin
Division #5
Beverly J. Lowry
Division #6
John H. Russell
Division #7
Larry W. Rowe, P.E.
General Manager / Chief Engineer

The Agency is also concerned that the transportation issues be addressed adequately. The initial Draft EIR stated that the solid waste will be transported from MRF's to the landfill using existing rail lines. Segments effecting the Agency would be :

- Bolo station to Amboy to the Eastern boundary of Township 8N, Range 4E
- Barstow to Boron, to Kern County Line
- Barstow to Victorville
- Victorville to San Bernardino, to the Western Boundary of Township 3N, Range 5W, located in the San Bernardino Mountains ②

The draft EIR/EIS also states that railcars may be stored within the ATSF facility at Barstow. (Section 4.12.2.1) The cars may also be switched at the Barstow Facility.

We agree with the supplemental EIR/EIS that each MRF would function as an intermodal waste transfer facility and would accomplish specific processing tasks. Careful inspection of incoming waste for hazardous or nonpermitted waste will reduce the potential that an accidental release of the waste would contaminate or impact the Mojave River recharge sites that parallel existing rail lines along the Mojave River, ATSF Facility at Barstow, and major highways.

The suggested mitigation for groundwater contamination is stated in our previous letter of March 3, 1993. Prevention of potential impacts through measures such as inspection of loads, transportation vessels and equipment, and the maintenance of tracks and facilities is the best method for groundwater protection. Staff training and hazard awareness are also effective preventative measures for spills and vessel leakage. ③

Supplemental mitigation measures for surface water and drainage, groundwater quantity, groundwater quality and groundwater monitoring as described in the supplemental EIR/EIS section 5.2.2 addresses the Agency concerns in those areas. ④

S-11

Thank you for accepting our comments on review of the supplemental EIR/EIS for this project. The additional information enhanced and clarified the draft EIR/EIS conclusions. Please call Jo Ann Auerswald or Norm Caouette if you have questions about the provided comments.

Sincerely,

JoAnn Auerswald

Jo Ann Auerswald
Water Resources Program Manager

Enclosure: March 3, 1993 Letter

cc: Planning and Resource Committee

DOCUMENT S-11
MOJAVE WATER AGENCY
RESPONSE TO COMMENTS

Response S-11-1

1. As noted by this comment, the Supplement reiterates the finding in the Draft EIR/EIS that the impact of the incremental increase ground water withdrawal required for onsite use cannot be reduced to below a level of significance. The Supplement also provides additional information on estimated ground water recharge of this aquifer based on analyses conducted for the CLC agriculture expansion (See Section 4.2.2.1 of the Supplement). Although this data indicates a higher ground water recharge rate than estimated in the Draft EIR/EIS, cumulative impacts would still be considered an unavoidable adverse impact. The proposed project's impact on ground water (130 acre-feet per year), is a minor portion of the cumulative impacts which includes the proposed ground water withdrawal by CLC of 30,000 acre-feet per year upon full development.

2. As described in Section 7.3 of the Draft EIR/EIS, the growth inducing impacts of the proposed action would be limited to the direct and indirect employment offered by the project (i.e., approximately 257 persons during construction, and approximately 288 during operation of the landfill at 21,000 tons per day of waste).

Response S-11-2

1. As detailed in Section 5.8.5 of the Draft EIR/EIS, MRFs would provide the primary inspection screen for hazardous and other special wastes. Procedures for screening inbound waste and training for MRF operators would be implemented by Rail•Cycle. Operational criteria would restrict wastes from facilities that do not provide prescreening for hazardous wastes.

Response S-11-3

1. As described in the response to the commenter's March 3, 1993 letter (see Chapter 2.0 of this Final EIR/EIS, Document 027, Comment 3), the mitigation measures suggested regarding Rail•Cycle's participation in the support of local emergency facilities, equipment and personnel, and Rail•Cycle's establishment of emergency response plans and procedures are included in Section 5.85 of the Draft EIR/EIS. As described in Section 5.8.1.4 of the Draft EIR/EIS, staff training and hazardous awareness programs would also be implemented.

Response S-11-4

1. No specific response required.

SECTION 3.4

ORGANIZATIONS COMMENTS AND RESPONSES

S-12

Silver Valley Realty

44244 NATIONAL TRAILS HIGHWAY
NEWBERRY SPRINGS, CA 92365

Fred Stearn, Broker

(619) 257-3560

RECEIVED
BY

January 19, 1994

Mr. Randy Scott, Planner
Planning Department
385 North Arrowhead Ave, 3rd Floor
San Bernardino, Ca 92415-0182

RE: COMMENTS INTO RAIL CYCLE'S SUPPLEMENT DRAFT EIR/EIS

Dear Mr. Scott:

It is my premise that a county approval of the Rail Cycle landfill application at Bolo Station, at any time prior to the reopening of the county landfill in Newberry Springs, would be a violation of tha Solid Waste Management element in the San Bernardino County General Plan.

To refresh the county's memory: on January 1, 1991 the county closed the Newberry Springs landfill, claimed it was only inactive, and refused to submit the change in status to the California Environmental Quality Act, for an examination of the likely negative environmental consequences that would result. ①

As result of that closure, Newberry Springs has become a dumping ground for residents and others who predictably have refused to travel the increased distances to the Yermo landfill, which will not even accept non-household trash, or the Barstow landfill which is even further away.

On May 21, 1991, the Sacramento law firm of Remy and Thomas sent a five page letter to Ms. Pamella Bennett, Director of San Bernardino County Department of Environmental Health Services. That letter is herein incorporated by reference. In summary, it requested that the Newberry Springs landfill be reopened immediately, based on the fact that it had been illegally closed. Neither Ms. Bennett, or anyone else from the county replied to that letter. ②

To support my opening paragraph premise, I submit the following quotations from the San Bernardino County General Plan:

1--"Countywide, there is ample landfill capacity, but most sites are located in the Desert areas which are distant from most urban areas. In addition, desert residents and their representatives have voiced their opposition to the desert becoming a 'dumping ground' for waste generated in other areas." Page II-D-10.

S-12

2--"In order to conserve the fragile desert environment and accomodate the needs of waste disposal, management practices must take into account the desires of Desert area residents." Page II-D-11.

3--Goal D-9 is: "A safe, efficient, economical, and integrated solid waste management system that considers:

....The unique relationship of disposal issues and the conservation of the....Desert area's natural resources." Page II-D-13.

4--Goal D-11 states, "Maximize the use of existing sanitary landfills through expansions and consider the reopening of inactive landfills where there is useful capacity remaining." Page II-D-13. ② CONT.

5--Policies/Actions SW-5 states, "Because the approval and siting of new sanitary landfills is a lengthy and costly process, the County shall extend the life of existing landfills to the maximum extent possible through the following measures:

.... f. Expansion of existing landfills and the reopening of inactive landfills when feasible." Pages II-D-14&15.

In conclusion, unless San Bernardino County reopens the Newberry Springs landfill before it approves a project such as Rail Cycle, then the approval of Rail Cycle will be in violation of the General Plan, and subject to being overturned in the courts.

Thank you very much.

Respectfully,

Fred Stearn

Fred Stearn

cc: doug romoli, blm
cc: ray kirkham, desert environmental response team
cc: hildamae voght, newberry springs harvard property owners assn.
cc: paul mordy, county counsel

DOCUMENT S-12
SILVER VALLEY REALTY - JANUARY 19, 1994
RESPONSE TO COMMENTS

Response S-12-1

1. The request to reopen the Newberry Springs Landfill and the issues surrounding that landfill are noted. These issues, however, are not pertinent to the proposed Bolo Station Landfill or the CEQA and NEPA review of the proposed project.

Response S-12-2

1. Following is a response to each of the San Bernardino County General Plan issues listed in the comment letter:
   - This quote, noting that ample landfill capacity is available County-wide, is based on information available at the time the General Plan was prepared and adopted in July 1989. Currently, the San Bernardino County Solid Waste Management Department estimates a remaining capacity of the existing system to be between 8 and 15 years (Congdon, 1993). Considering that AB 939 mandates that counties secure long-term disposal capacity (i.e., 15 years), existing County landfill capacity cannot be considered "ample".
   - The CEQA/NEPA review process in conjunction with the public hearing decision-making process for the proposed project, inherently involves the public, and provides full public disclosure of the potential impacts of the project to desert area residents.
   - By means of the EIR/EIS and the County review procedures for the proposed Bolo Station Landfill, the unique natural resources of the desert, and the potential project impacts to these resources are evaluated and considered.
   - This quote is not specifically related to the proposed action, which would assist in meeting not only County-wide landfill disposal requirements, but region-wide needs.
   - The proposed Bolo Station Landfill is not inconsistent with maximizing the use of existing County landfills. As detailed in Chapter 2.0 of the Supplement, regional waste disposal needs will require more landfill capacity than available including the potential for the expansion of existing landfills.

2. As discussed in Section 5.14 of the Draft EIR/EIS, the proposed action is consistent with the goals and policies of the County General Plan's Solid Waste Management Element. Ultimately, the County Board of Supervisors will determine the proposed project's consistency with the County's General Plan, as well as consider an amendment to the General Plan to establish the rail-served landfill as an allowable land use on the Bolo Station site (see Section 2.4.1 of the Draft EIR/EIS).

MORONGO BASIN CONSERVATION ASSOCIATION

POSTOFFICE BOX 218 TWENTYNINE PALMS, CALIFORNIA 92277

January 25, 1994

County of San Bernardino
Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, California 92415-0182
Attention: Mr. Randy Scott

Dear Mr. Scott:

My comments are made for the Morongo Basin Conservation Association, and for myself personally as well.

What is the most precious resource in the desert? WATER!

And how much is known about where it flows, and what connections there are between aquifers under large expanses of the desert? VERY LITTLE!

One thing we do know is that under almost every dry lake bed in the desert there exists a natural reservoir, usually not too far from the ground surface. These waters are often too heavily mineralized to be potable, sometimes to the extent of being commercially valuable, as noted by BLM on page 4.3-1 of the Supplement to the Draft EIR/EIS for the Rail-Cycle - Bolo Station Landfill, December 1993: "BLM concluded that the southern portion of the site would be reclassified as valuable for prospecting for calcium chloride, and prospectively valuable for sodium chloride." Since minerals can only be mined where they occur, this would seem to be a good argument against using this territory for a waste dump. ①

Since the water table is only 37 feet down under the southern portion of the site (page 4.2-1, Sec. 4.2.2.1.2-2.), which is quite close to the Bristol Dry Lake bed, this would seem to make the waters under the lake bed quite vulnerable to contamination from any possible leakage from the dump. During wet years, Bristol Lake becomes a very large wet lake that spreads far and wide. About six years ago, it even covered the road across the salt flats for a time. Logically, the natural reservoir under the lake bed probably expands over a greater distance than usual, as the water sits there and soaks into the ground and evaporates up into the air. According to the Supplement, "The 100-year floodplain as mapped essentially follows the 620-foot contour, and potentially encompasses a small portion of the extreme southwestern corner of the project site." (p. 4.2-1, Sec. 4.2.1-1.) Considering that, "Based on the seismic refraction and reflection data, both the deep bedrock reflector and the near surface water table were continuous and unbroken beneath the proposed site." (p. 4.1-3, Sec. 4.1.2.1-3.) And also that, "Ground water flow within Bristol Basin is radial from the outlying recharge areas to the center of Bristol Dry Lake. The ground water gradient beneath" the dump site "is generally toward the south beneath the northern half and then turns to a southwesterly direction in the south half of the landfill area toward....the cone of depression in the southern portion of the site caused by the Cargill wells," (p. 4.2-1, Sec. 4.2.2.1.2-1.&2.) all of this indicates the strong possibility that any possible leakage of contamination from the Bolo site would end up in the waters under the Bristol Dry Lake bed. Where would it go from there; and how far would it spread? WHO KNOWS? ②

A hint as to where it might go can be derived from the enclosed Letter to the Editor written by the late Colonel Tom O'Connor (father of the Astronaut Donald O'Connor) in 1989. This mighty mega-dump would be too close for comfort to the underground aquifers that sustain the towns in the area. Salt and mineral companies have long been established in the Bristol Dry Lake area, one with lands next to where the dump is proposed. Though the water that they use in their evaporation processes is not potable, that water, and all the rest ~~of the rest~~ of the aquifer under the dry lake could be poisoned by that dump, if it were to leak. I would not want to use any of the products of those salt companies if the dump were to be established at the proposed location. ② CONT.

Another enterprise that could be adversely affected by the Bolo dump is the Cadiz Valley Agricultural Development Corporation, which owns 39 square miles in the Cadiz Valley, and has been there for six or seven years. In 1991, it was growing 810 acres of table grapes and 640 acres of citrus. Having searched for a large water resource hitherto undiscovered, for agriculture shoved out by development, it has developed five wells producing an ample supply of fine water. The tremendous Rail Cycle dump, proposed so nearby, could quite likely pollute this underground aquifer, as well as the clean air of the region, and spoil this as a place to live and grow crops. The agricultural project is a productive, worthwhile use of the land; and it should have first priority over more recent proposals, especially a huge dump. For more information on this, telephone (805) 664-8999. ③

On page 5.4-11 of the Supplement to the EIR/EIS, it says,"....the Rail-Cycle project would result in significant unavoidable adverse NO_x emissions increases in the Southeast Desert Air Basin." The SEDAB is a non-attainment region for NO_x. An important goal of the air pollution agencies throughout the State is to move their jurisdictions closer to attainment of the air quality standards. This was an objective in the Air Quality Management Plan submitted to the State Air Resources Board by the Mojave Desert Air Quality Management District under its former name of San Bernardino County Air Pollution Control District. In addition to NO_x exceedances, it says on page 1-7 of the Supplement "....based on the revised analysis in this Supplement the following additional impacts have been found to be unavoidable and adverse: Air quality impacts related to continued exceedances of the states ambient air quality standard for particulate matter less than 10 microns in aerodynamic diameter (PM_{10}), and oxides of nitrogen (NO_x), and reactive organic gases (ROG) emissions in a federal and state nonattainment area for ozone." NO_x and ROG are major components of ozone. ④

Other pollutants emitted by the project would include sulfur dioxide, carbon monoxide and solid particulates. Most of these would be emitted by locomotives carrying the wastes across the desert. The route for these many train trips back and forth would be upwind of the Morongo Basin, which gets most of its winds from the northwest, and might suffer air degradation as a result. "The feasibility of rail electrification was evaluated. The findings of this evaluation indicate that rail electrification solely to mitigate Rail-Cycle's air impacts is not feasible on the basis of cost and practicality," and "CARB reports that privately financed railroads do not consider converting their lines as economically feasible," it says on page 5.4-11 of the Supplement. This is bad for the desert, especially in that railroads produce large amounts of sulfur oxides, which have been a very minor factor in this part of the desert. Many people have come to live in the Morongo Basin for the health benefits of the good air. ⑤

In regard to plastic liners: Sooner or later, they are all likely to leak; the seams are their weakness. Tiny leaks would probably grow under the stress and strain of the load at Bolo and the possibility of ensuing land subsidence ⑥ (admitted, but minimized in the Supplement). It would seem that subsidence could be a real threat, with water only 37 feet below ground surface, and being pumped by wells on the site. The enclosed pictures show how the Copper Mountain Dry Lake bed collapsed when water was pumped out from under it by nearby wells and then put into two small lakes that had been excavated on the dry lake bed surface. Huge cracks opened and swallowed down the water. The Bolo site is very near the edge of Bristol Dry Lake. ⑥ CONT.

The garbage element in the wastes would be likely to attract rats and mice that could tunnel and gnaw through protective plastic and clay layers of the liners. Rodents often chew holes in my plastic irrigation system. Proposed early warning systems could detect leaks; but it might be difficult to repair a leak under tons of garbage. ⑦

The point of all this about leakage and water contamination is that dumps all around the country have been showing bad records for leaking; so leakage is very likely. Therefore, the best locations for them would be where there is no reachable water table, or where the water table is very far below the ground surface--NOT ON DRY LAKE BEDS OR NEAR TO THEM,WHERE GROUND WATERS ARE NEAR THE SURFACE AND THUS VULNERABLE TO CONTAMINATION. The Broadwell Lake dump is in a very bad location, also, especially for a toxic waste dump. ⑧

One of the worst aspects of all of the dumps proposed for the desert is that under private ownership wastes can be dumped there from other states and even from other countries, because of a Supreme Court ruling on the subject. If the County would manage its own dumps, it could prevent this. South Carolina has had a great deal of trouble with a toxic dump near Lake Marion. ⑨

Recycling is coming into its own now, and should soon reduce the waste stream. In that case, the owners of huge mega-dumps in the desert might be looking for outside business to use their immense capacities. It is bad enough that the proposal would use San Bernardino County's desert as a trash can for Los Angeles County's garbage. That is like sweeping the dirt under the rug to get it out of sight. What incentive would Los Angeles have to work on recycling and reducing its waste stream, if it could just put it "out of sight, out of mind?"

We would appeal to the Bureau of Land Management that this would not be multi-purpose use of good desert land, which they always advocate, but a SINGLE-PURPOSE USE--a total sacrifice! We strongly support the "no action alternative" as explained on pages 5.4-1 and 5.4-4 of the Supplement, using whichever options would work out best under the circumstances. Basically, Los Angeles should take care of its own garbage, in its own territory.

Sincerely yours,

Susan Luckie Reilly

Susan Luckie Reilly, Director
Publicity and Education
MORONGO BASIN CONSERVATION ASSOCIATION

Enc: O'Connor letter
Copper Mt. Lake pictures
Copies: ARB, MDAQMD, Colorado River Basin Water Quality Control Board and other agencies

LIST OF ATTACHMENTS

1. The following were attached to the January 25, 1994 letter from the Morongo Basin Conservation Associates.
    - Tom O'Connor. *Trash Trains Worry Many*, letter to the Editor.
      Desert Trail, September 28, 1989.
    - *Earthquake Damages Copper Lake and Park*, Desert Journal.
      August 3, 1972.
    - Enlarged photographs from the article in the Desert Journal:
        - Cave-in From One Part of Lake to Another
        - Closer View
        - This Large Break
        - Water was Foaming
        - Fault Line
        - Walter Altnow

2. Due to the length of these attachments they have not been reproduced as part of the Final EIR/EIS. They are included in the administrative record for the Final EIR/EIS and are available for public review at the following locations:
    - Planning Department
      San Bernardino County
      385 North Arrowhead Avenue, 3rd floor
      San Bernardino, California 92415
    - California Desert District
      U.S. Bureau of Land Management
      6221 Box Springs Boulevard
      Riverside, California 92507

DOCUMENT S-13
MORONGO BASIN CONSERVATION ASSOCIATION
RESPONSE TO COMMENTS

Response S-13-1

1. As noted in this comment, based on the available information at the time of publication of the Draft EIR/EIS, BLM concluded that the southern portion of the site would be reclassified as valuable for prospecting for calcium chloride, and prospectively valuable for sodium chloride. The reclassification means that the area is valuable for prospecting but it does not mean that there are economically valuable quantities of calcium chloride or sodium chloride beneath public lands at the site. In fact, the BLM does not consider there to be economic mineral resources underlying the public lands (Jacobs 1991a; Rust, 1993e; Waiwood, 1994).

Response S-13-2

1. The refined surface water, and ground water quantity and quality analyses in Section 4.2 of the Supplement take into account the maximum potential rise in the ground water table due to a 100-year level flood. The ground water analysis, as described in Section 5.2 of the Supplement, considers this maximum rise, as well as the maximum potential migration rate across the site in the event of a release (liner failure) from the landfill. As noted in Section 5.3.2.2 of the Supplement, even if a release occurred at the southernmost boundary of the landfill, the ground water monitoring system and UZM system would assure early detection, in accordance with Subtitle D and CCR Title 23. Should a release occur, Rail•Cycle would be required to implement an appropriate corrective action to protect the ground water quality of the Bristol Basin. In addition, it would take over 10 years for contaminated ground water to travel the 750 feet to the project boundary. Sufficient time would be available to remediate the release and protect Cargill wells.

Response S-13-3

1. As shown on Figure 4.2.1 of the Supplement, ground water movement beneath the site is south toward the Bristol Dry Lake bed and would not travel from the landfill site toward the CLC agricultural lands that are located approximately five miles east of the site. It, therefore, would not be possible for a release from the landfill to affect the agricultural operation. Section 5.2 of the Supplement further details the potential for ground water travel of a liquid or gas in the remote possibility of a release, and also provides supplemental ground water protection mitigation measures.

2. Section 5.7.1.2.5 of the Draft EIR/EIS assesses the potential air quality impacts of the proposed project on the CLC agricultural operations and concludes that the proposed action would not result in a significant impact on crops.

Response S-13-4

1. As noted in this comment, Section 5.4 of the Supplement acknowledges that the proposed project would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMD Air Quality Attainment Plan related to attainment of emission reductions for ozone precursors. The MDAQMD has reviewed and submitted comment on the Supplement, and have concurred with the primary finding of the air quality analysis (MDAQMD, 1994).

2. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulations XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulations XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response S-13-5

1. As shown in Figure 4.7.2 of the Draft EIR/EIS, the SCAB is a primary source of air pollutants in Morongo Basin via transport through mountain passes from the SCAB to the Morongo Basin. Prevailing winds and intervening mountains would determine the extent to which locomotive emissions from the proposed action could contribute to pollution in the Morongo Basin.

2. Although Section 5.4 of the Supplement concludes that rail electrification solely to mitigate Rail•Cycle's air quality impacts is not economically feasible, region-wide efforts are

underway to implement measures to significantly reduce locomotive emissions. A recent study was conducted under contract to the CARB to develop and recommend a regulatory strategy and implementation schedule for reducing locomotive emissions (EF&EE, Inc., 1993). The report concluded that feasible and cost-effective control techniques for locomotive emissions include:

- Retarding injection timing and other engine modifications.
- Selective catalytic reduction (SCR).
- Use of liquefied natural gas (LNG) fuel with low-emission dual-fuel or spark-ignition (SI) natural gas engines.
- LNG combined with SCR.
- Electrification.

3. Based on the proposed regulatory framework, allowable locomotive emissions per net ton-mile transported would be reduced by 80 percent between 1996 and 2003. As one of California's three major railroads, ATSF is actively participating in the efforts to develop strategies to reduce locomotive emissions.

Response S-13-6

1. A detailed analysis of the evaluation of the Rail•Cycle-proposed liner system has been conducted by Rust (1993a). Also included in the Rust report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned at 0.003 to 0.6 gallons acre/year, depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

2. As noted in this comment, landfill liners may leak. Based on an exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However, the authors clearly make a distinction between liners and liner systems, and further, state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that: "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layer, performing complementary functions." The text makes it clear that it is inaccurate to conclude that liner systems cannot prevent water quality degradation.

3. As detailed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the proposed Bolo Station Landfill liner is a double-composite liner system and also includes an UZM system to provide 100 percent monitoring of the vadose zone beneath the liner.

4. Section 5.1.1.2 of the Supplement provides an analysis of the maximum potential for ground settlement at the site due to loading on foundation soils (weight of the wastes and cover), and onsite and offsite ground water pumping. Based on investigations and modeling efforts conducted subsequent to preparation of the Draft EIR/EIS, the Supplement concluded that ground settlement would not be significant. Moreover, based on the refined soils and geological data as detailed in Sections 4.1 and 5.1 of the Supplement, there is no evidence to indicate "huge cracks" or other discontinuities that could result in significance subsidence.

Response S-13-7

1. As described in Section 5.8.1.1.5 of the Draft EIR/EIS, vector control (including control for small rodents) would be implemented at the landfill and are required by CCR Title 14. Frequent inspection would be conducted for vector activity and an eradication program implemented, if necessary. Moreover, subsequent to the initial waste fill and daily cover, the liner system would be at substantial depth and unlikely to be accessible to rodents.

Response S-13-8

1. As described in Response S-13-6, landfill releases can be controlled with a combination of liners and drainage layers, performing complementary functions as designed for the Bolo Station Landfill double composite liner. Also, as detailed in Section 5.2.1 of the Supplement, the required minimum separation between the wastes and the ground water table (5 feet as required by Title 23, Chapter 15), has conservatively been designed to account for maximum ground settlement, the maximum rise in the ground water table due both to the 100-year level storm and the cessation of pumping at the Cargill wells, and a 9-foot capillary zone. At the southwest corner of the proposed landfill, the location at which the ground

water is closest to the surface, the required separation between the base of the landfill and the highest ground water table would be 29.6 feet.

2. The comment regarding the Broadwell Basin Residuals Repository is noted. Prior to construction, the proponents of that project must still obtain permits from several responsible agencies. Furthermore, the issues pertinent to the proposed Broadwell Basin project, which would be a Specified Hazardous Waste Facility, are not pertinent to the proposed Bolo Station Landfill (a Class III, nonhazardous municipal waste) or the CEQA and NEPA review of the proposed project.

Response S-13-9

1. It is assumed that this comment is referring to the Supreme Court case, *Fort Gratiot Sanitary Landfill, Inc. V. Michigan Department of Natural Resources*. In this case, the Court reaffirmed a previous decision that solid waste is an article of commerce and is subject to the Commerce Clause of the U.S. Constitution. The Court struck down the 1988 amendments to the Michigan Solid Waste Management Act which prohibited a site from disposing of out-of-county wastes unless such disposal had been explicitly authorized by the county in its Solid Waste Management Plan. The Court also found that there was "no valid health and safety reason for limiting the amount of waste that a landfill operator may accept from outside the State, but not the amount that the operator may accept from inside the State."

2. The proposed Bolo Station Landfill, as well as other landfills in the County, could potentially accept out-of-state wastes. It is highly unlikely, given economic and environmental constraints on municipal solid waste landfills in California, that municipal waste from other countries would be disposed at this site.

3. A primary incentive for Los Angeles County to reduce its waste stream is the AB 939 mandate for California cities and counties requiring a 25 percent reduction in solid waste disposal volume by 1995 and a 50 percent reduction by 2000. It is reasonable to assume that the network of MRFs that may be a part of the Rail•Cycle system would assist the cities and counties in complying with AB 939. Resources to be provided by Rail•Cycle that can assist AB 939 compliance would include waste processing and recycling facilities and information useful in developing and monitoring waste diversion programs.

S-14

Silver Valley Realty

44244 NATIONAL TRAILS HIGHWAY
NEWBERRY SPRINGS, CA 92365

Fred Stearn, Broker

(619) 257-3560

January 28, 1994

Mr. Doug Romoli
Bureau of Land Management
6221 Box Springs Boulevard
Riverside, Ca 92507-0714

SUBJECT: COMMENTS INTO SUPPLEMENT TO RAIL CYCLE DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT

Dear Mr. Romoli:

It is hoped that this comment will prevent the two lead agencies from repeating a very serious mistake in the preparation of Broadwell Basin Residuals Repository Final EIR/EIS. (BBRR).

In the BBRR Final EIR/EIS there was a failure to address all reasonable comments asking for your analysis of how reasonably foreseeable catastrophic event consequences would affect the environment, for the project, and for the reasonable alternatives thereto. Many requests for particular event analysis were sloughed off with the comment that such an event had a low probability, and no attempt was made to calculate the likely environmental impact. This was, as I recall, the reply to questions and comments concerning large scale seismic, flood, groundwater pollution and volcanic events.

The Newberry Springs/Harvard Property Owners Association has made similar comments into the Supplemental Draft EIR/EIS for Rail Cycle's project. Before preparing your replies to same, we respectfully call your attention to the below exerpts from the Council on Environmental Quality National Environmental Policy Act Regulations:

①

40 CFR 1502.14 ALTERNATIVES INCLUDING THE PROPOSED ACTION

"This section is the heart of the environmental impact statement.... "it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public. In this section agencies shall:

(a) Rigorously explore and objectively evaluate all reasonable alternatives,....

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits...."

S-14

40 CFR 1502.22 Incomplete or unavailable information.

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

(a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.

(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:

(1) A statement that such information is incomplete or unavailable;

(2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;

(3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

The amended regulation will be applicable to all environmental impact statements for which a Notice of Intent (40 CFR 1508.22) is published in the Federal Register on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

(51 FR 15625, Apr. 25, 1986)

①
CONT.

40 CFR 1502.22 above requires examination and comparison of catastrophic consequences, in spite of their low probability.

Thank you for your consideration.

Sincerely,

Fred Stearn

Fred Stearn

cc: randy scott, san bernardino county
cc: ray kirkham, desert environmental response team
cc: hildamae voght, newberry springs/harvard property owners assn.

DOCUMENT S-14
SILVER VALLEY REALTY - JANUARY 28, 1994
RESPONSE TO COMMENTS

Response S-14-1

1. The Draft EIR/EIS and Supplement for the proposed Rail•Cycle-Bolo Station Landfill project provides conservative assumptions and impact analyses of each environmental topic based on available data. As noted in the comment, the EIR/EIS evaluates potential events considered as "reasonably foreseeable." Project design and mitigation measures were also determined on conservative values and standards based on consultation with appropriate regulatory agencies (i.e., MDAQMD, RWQCB). Examples of the conservative assumptions used in the analyses are as follows:

   - **Seismic Hazards**: Seismic design is based on the highest peak acceleration at the Bolo Station site which could result from the maximum probable earthquake in the region.
   - **Ground Water Quality:** Required separation between wastes and base of landfill considers the potential concurrent, "worst case" conditions including maximum soil consolidation (based on normally consolidated soils), maximum capillary rise, ground water table rise due to 100-year, 24-hour storm event, and cessation of Cargill well pumping.
   - **Flood Hazards:** Hydrologic and hydraulic analyses to identify required drainage improvements were based on the San Bernardino County Hydrology Manual and 100-year, 24-hour peak flow levels.

2. As quoted in this comment, 40 CFR 1502.22 defines "reasonably foreseeable" impacts to include those which may have catastrophic consequences. However, it does not require that events which are catastrophic and not "reasonably foreseeable" be investigated. For example, the probability of a concurrent 100-year flood, and 8.0 magnitude earthquake is extremely remote and not within the realm of "reasonably foreseeable."

3. Similarly, CEQA requires that the greatest emphasis should be placed on those impacts that are most significant and most likely to occur (Remy, Thomas, & Moose, 1992). Section 15145 of the CEQA Guidelines states: "If after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact." This section is necessary to relieve the lead agency from a requirement to engage in idle speculation (Remy, Thomas, & Moose, 1992).

S-15

Sierra Club
San Gorgonio Chapter

Serving Riverside and San Bernardino Counties
Tahquitz Group • Los Serranos Group
San Bernardino Mtns. Group • Mojave Group
568 N. Mountain View Ave., Suite 130
San Bernardino, CA 92401
(714) 381-5015

Land Management Dept

County of San Bernardino
Planning Dept
385 North Arrowhead, 3rd Floor
San Bernardino, CA 91425-0182
Attn: Randy Scott

Dear Mr. Scott; 2 February 1994

Thank you for sending us a copy of the Supplement to the draft EIR/EIS to the proposed Rail-Cycle Bolo Station Landfill (State Clearninghouse No 91092020).

We have reviewed the document and are very concerned about the process. The document purports to provide additional information on geology, soils, hydrology, air quality, and noise, yet we can can find little or no new or meaningful mitigation measures. ①

The draft EIR/EIS which we heavily criticized on just these same factors, and which is woefully inadequate to meet NEPA and CEQA requirements, has not been improved by this cosmetic supplement.

For example, Chapter 2.0 Purpose and Need for Proposed Action, adds more graphs and charts to embellish Rail Cycle's alleged need, but adds no new real information on needs assessment. As has been made clear at the San Bernardino County Solid Waste Advisory Task Force meetings, Railcycle has great needs to find new markets, but the people of San Bernardino County and Southern California don't exist merely to be unwilling customers of Waste Management. This Supplemental document unfortunately, doesn't provide additional information on alternatives---certainly REDUCE, RECYCLE AND REUSE in its many forms should have been explored. Dumps are obsolete and megadumps are even more obsolete. Railcycle has probably spent more than $20 million trying to advertise the Bolo project which almost no one in San Bernardino County wants. This wasted money could have been much better invested in real recycling and source reduction programs. ②

The Supplement fails to address the environmental problems of the Franconia dump problem---the additional air pollution and noise and traffic problems this trash train from LA County to Arizona would cause San Bernardino County residents. ③

The Supplement is a slick, fat document, but it does not address the concerns we raised in the draft EIR/EIS. The proposed project will still contaminate the groundwater, pollute our precious air quality, and cause noise and traffic problems. The main cancer of the proposed megadump project is that it continues to fly in the face of the intent of AB 939, the California Integrated Waste Management Act. AB 939's purpose is to increase waste reduction, reuse and recycling. Rail Cycle's sole purpose, according to the Supplement and previous documents, appears to be to increase profits. Fortunatley , we are a nation of laws. ④

Please keep us informed of the process.

Sincerely,
Peter Burk Peter Burk
Chapter Waste Management Chair

. . . To explore, enjoy and preserve the nation's forests, waters, wildlife, and wilderness . . .

DOCUMENT S-15
SIERRA CLUB
SAN GORGONIO CHAPTER
RESPONSE TO COMMENTS

Response S-15-1

1. The Supplement provides additional information and analyses in the topical areas noted in this comment. The scope of the Supplement was based on consultation with the County and BLM, and in response to major issues identified in comments to the Draft EIR/EIS. Based on the analyses, additional mitigation measures have been provided in the Supplement. In some cases, the additional data confirmed that mitigation measures included in the Draft EIR/EIS sufficiently mitigated potential impacts (i.e., mineral resources impacts).

2. As noted in Section 1.1 of the Supplement, the Supplement was not prepared to address individual comments on the Draft EIR/EIS. Specific responses to the Draft EIR/EIS are included in Chapter 2.0 of this Final EIR/EIS.

Response S-15-2

1. The updated information in Chapter 2.0 of the Supplement, provides clarification on long-term regional landfill requirements. The source of the data is the CIWMB.

2. The proposed action would assist the region in meeting the AB 939 requirement to demonstrate 15 years of disposal capacity for solid waste that cannot be diverted through source reduction and recycling. Further, it is reasonable to assume that the networks of MRFs which would serve the Rail•Cycle project would assist the cities and counties in complying with the AB 939 waste reduction and recycling requirements (25 and 50 percent waste stream reduction by 1995 and 2000, respectively). Rail•Cycle would also be a resource for cities and counties for information useful in developing and monitoring waste diversion programs.

Response S-15-3

1. WMNA has purchased the rights to construct new recycling and transfer facilities, a soil-regeneration site, and a state-of-the-art landfill at Franconia in Mohave County, Arizona. The noise and air quality impacts in San Bernardino County from the potential transport of waste-by-rail from southern California to the site in Arizona, are addressed in Section 5.4 of the Supplement as part of the No Action Alternative.

2. As noted in Section 5.4 of the Supplement, under the No Action Alternative, it was assumed that two of the seven MRFs planned to contribute waste to the proposed Bolo Station Landfill would transport 3,000 tons each by rail per day out of Los Angeles County. Two trains per day, each carrying 3,000 tons of solid waste would transport waste from southern California to remote, out-of-state landfills. Waste could be transported to either the Franconia facility via the ATSF rail line that parallels Interstate 40 or to East Carbon Canyon Landfill via ATSF rail lines to east of Barstow, and then by the Union Pacific Railway on rail line that parallels Interstate 15. Transportation related air emissions would be equivalent for either route (total distance within 10 miles), and occur within the same air basins (i.e., SCAB and SEDAB).

3. Air quality and noise impacts are quantified for the No Action Alternative (which includes transport of waste to the Franconia Landfill) in Sections 5.4 and 5.5, respectively, of the Supplement. Under the proposed project, no waste would be transported to WMNA's Arizona landfill since the waste could be accommodated at Bolo Station Landfill.

Response S-15-4

1. Responses to the commenter's letter regarding the Draft EIR/EIS are included in Chapter 2.0 of this Final EIR/EIS (see Documents 045 and 046). Rail•Cycle, the County, and BLM acknowledge that provision of and commitment to alternative waste management practices is an important goal. A commitment to achieving this goal has been established by the California Legislature through AB 939. As noted in Response S-15-2, in addition to the state's commitment to waste reduction goals, the provision of adequate disposal capacity for post-recycled wastes is also a requirement.

DESERT ENVIRONMENTAL RESPONSE TEAM
P. O. Box 2183, Twentynine Palms, CA 92277
(619) 361-3501 or (619) 367-1973

RAIL-CYCLE BOLO STATION LANDFILL

February 14, 1994

To:
County of San Bernardino
Planning Department
385 North Arrowhead, Third Floor
San Bernardino, California 91425-0182
Attn: Mr. Randy Scott

From: Desert Environmental Response Team ("DERT")

Subject: Overview, Comments, Objections, Reference SUPPLEMENT TO DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT RAIL-CYCLE BOLO STATION LANDFILL (State Clearinghouse No. 91092020).

This matter has come upon our purview because of the necessity to preserve, protect, and enhance the quality of the human and diverse biotic environment, which we enjoy and respect as unique and one of a kind, where we as residing desert residents, live, love, and recreate.

As members of "DERT," and as individuals, and as desert residents of San Bernardino County, we have reviewed, commented on and participated in environmental and community planning matters relating to the proposed "mega garbage dump" which we view as a grave and dangerous threat to the quality of our lives, health, and environment.

①

We are concerned about the catastrophic impacts the proposed "mega garbage dump" would have upon residents living in communities near the site of despoliation, and believe that the truth-in-fact of adverse environmental impacts have been mischaracterized and not adequately addressed in the Draft and Supplement EIR/EIS.

Failure to substantially address the totality of adverse environmental impacts the "mega garbage dump" would have upon individuals, communities, and the future of developing technologies throughout the greater Southern California region has been insidiously avoided since the inception of the project by the proponent's desire to capture and monopolize the waste stream. Unscrupulous collusion between government and private enterprise are recent developments in solid waste management violative of anti-trust and fair trade practices, restricts freedom of choice and principles of individual responsibility, and denies fair and just sense of equity for rural residents seeking solitude and independence from garbage inundation.

It is imperative that the Board of Supervisors of the County of San Bernardino, as a duly established government entity organized under the Constitution of the State of California, be held responsible for complying with and implementing the laws of the State of California, including CEQA, and ensuring that agencies, instrumentalities, officials or employees of the Board of Supervisors comply with the laws of the State of California, and further, respect the rights of citizens guaranteed and protected under the Bill of Rights to the Constitution of the United States, particularly those rights embraced within the meaning of the First Amendment.

We see the Board of Supervisors dangerously traversing their publicly mandated responsibilities and judicious principles which Americans, and citizens and residents of the desert regions of the County of San Bernardino, have defended, fought, and died to preserve and protect. Our Union gathers strength and support in our diversity of thoughts and opinions and we do not wish or desire to see our expressions trampled upon by condescending arrogance, arbitrary or capricious assaults upon our rights as individuals, citizens, or as members of "DERT."

① CONT.

In addition, the Board of Supervisors is a legislative body authorized to hear and approve matters involving CEQA and is responsible for the certification of the final environmental impact reports pursuant to CEQA. While final certification or denial of the proposed BOLO STATION "mega garbage dump" is pending during the public comment period, it is our perception that the Board of Supervisors, in assessing the potential catastrophic impacts set forth in the Draft and Supplement EIR/EIS, has been negligent in its cumulative impact analysis the significant and unavoidable adverse effect the numerous toxic, hazardous, municipal, nuclear "garbage dump proposals" would have in the greater region along the historic State Route 66 corridor between Barstow and Needles. We strenuously object to this becoming "trash alley" for Los Angeles.

In the past, the Board of Supervisors, has been irresponsible in granting various general plan amendments, and for making land use decisions not in compliance with the spirit of CEQA, and has created inconsistencies within the County General Plan in apparent violation of State Planning Law. This has lead to a rash of lawsuits and litigation against the County as a direct and proximate result of alleged CEQA violations throughout the region. These lawsuits range the width and breadth the County's environs from the Chino foothills and rivers and agricultural preserves, to chaparral at the base of the San Gabriel Mountains, and in the San Bernardino mountainous regions themselves, and along the scenic and open space corridors of the greater Mojave Desert.

It appears that the Board of Supervisors has dangerously embarked upon the wholesale plunder of the County's natural resources substituting delegated governmental responsibility for alleged market driven solutions by selling out the charter of its own existence by exchanging publicly owned lands and resources for private enterprise and profit taking at the expense of the common good and welfare of our homeland.

Our resources are not inexhaustable. Corruption of railroad monopolies of the 19th century sporting bison hunters descimating wild herds of buffalo on the great plains by heartless game hunters shooting and killing from rail gauges has yielded to 20th century corrupt monopolies seeking to descimate the open plains and dramatic vistas of the California desert by substituting garbage for bullets. Financially powerful industry standing over insipid government with a gluttonous appetite to dump L.A.'s monsterous mass of garbage from rail cars in our desert is a crime of no less contemporary proportion.

The regional comprehensive plans of Southern California area governments amounts to no less than a regional conspiracy with government assuming a subserviant position to corporate interests alleging to define a process of regional dialogue which will "safely" and "efficiently" address waste disposal. Safety is a primary government responsibility owed to the people and with respect to the environment. Efficiency is not a mandate of government to be provided to corporations at public expense.

① CONT.

When government streamlines permitting processes with general plan amendments and blanket approval of unproven mitigation measures not clearly defined and vaguely described as market based solutions substituted for governmental controls, the failure to address the fact that safety and efficiency are divided by economy merely speaks of felonious stupidity and spells disasterous consequences for health, safety, and well being of the public and environment.
A never here to fore seen "mega garbage dump" proposed on terms of safety and efficiency is a contradiction which lays the groundwork for "dump 'n run" approval to create another superfund clean-up site.

The size, scope, and scale of the proposed "mega garbage dump" are its most fatal aspects. The grossly unmanageable scale most assuredly guarantees a design for massive air and water pollution on an unmitigatable scale. Liquid garbage leachate would migrate through sand lens layers of sediment to the shallow water table below. Massive amounts of air pollution from transportation, construction, operations, and off-gassing from the rotting mass of garbage heaped high into the air, would create a valley of smog. Once the underlain aquafer is contaminated and polluted, the high grade mineral resource recovery operations on Bristol Lake will be destroyed. The quality of the agricultural products a few miles away would certainly be diminished by reason of vector control problems associated with the importation of infectious plant disease and quarantined insects.

For all creatures living in the valley, the proposal set forth in the Supplement and Draft EIR/EIS is a summons for death. By entertaining lurid and rank proposals on the vulgar scale and monstrous magnitude of the Rail-Cycle "mega garbage dump," government is defining for the next century a process of Orwellian regression into an environmental nightmare fraught with corporate Goliaths whose grotesqueness are their proven criminal histories of unwholesome environmental neglect.

Studied and intellectual engineering and analysis has been reduced to public relation marketing strategies attempting to resolve public concern with reams of information containing essientially one major problem repeated over and over, i.e., false and misleading conclusions. This project has been designed by breaching the bounds of professional integrity ultilizing lies of omission and other propaganda techniques to present nothing but a dim-witted vision of a gigantic modern midden, an enormous trash heap whose only form speaks of derogatory contempt of nature and threatening folks wishing not to be dumped on.

If the idealism of AB 939 proffered by the authors were implemented without the meddlesome "Import" and "Export" elements which reduce this legislation to a mandate for "mega garbage dumps," the goals and strategies of waste reduction and prevention, self-sustaining markets for recycled materials, waste to energy and use of available technologies for treatment of wastes, including manufacturing resposibility for recycling, would preclude the necessity for the proposed action.

① CONT.

The over permitted capacity of the proponent's project is not a failure of accurate needs assessment, but rather an insidious effort to ultilize the "Import" and "Export" components of AB 939 to import to their chosen site of despoilation, massive amounts of the regions garbage with absolutely no assurances that any MRF's would ever be operating, and by design of neglect, maintain the status quo and stall for time when society must face the serious realities of mass conspicious consumption and the pressing necessity to implement the "ideals" embraced in the goals and strategies of AB 939 absent the "Import" and "Export" element.

Because of the historical abuses of private enterprise and irresponsible neglect of the environment, government is selling out its responsibility by opting for market driven solutions which have brought us to this point of convergence of a multitude of environmentally disasterous consequences. Governments at local, state, and federal levels are charged by public and legislative mandates under environmental protection laws to preserve, protect, and enhance the quality of our air, land, and water, to promote biotic diversity and survival, to develope strategies to protect rare, threatened, and endangered species, plants and animals alike, to protect visual and open space resources, manage cultural and scientific properties with care, manage air quality, and develop strategies for securing adequate water supplies, watershed management, wetlands protection, and agricultural preserves.

If it were possible to propose one action that would literally desecrate every stated goal and policy of the preceeding paragraph its summation would be RAIL-CYCLE BOLO STATION LANDFILL. Two thousand square miles of the Mojave Desert drains directly into Bristol Lake. The proposed site of despoilation lies directly adjacent the wet surfaced playa in an ancient dune sand deposit at the focus of this great drainage basin. The site is a virtual geologic roadmap through time whose underlying evolutionary sediments are the fossiliferous skeletal remains along ancient shorelines from a period of great inundation in the Bristol, Cadiz, and Danby trough.

At this focal point on the landscape are the dynamic forces of distillate time where pre-historic men and women gathered on the lakeshores edge and found secular and sacred values in the surrounding availability of resources. The late period of Pleistocene animals are ghosts gone by, yet they speak to us through the rocks about their lives, their time, and their age of existence. The shoreline reveals acres of lithic debris where pre-historic men no longer flake and fashion stone of jasper and agates into spear and arrow points. The hammer stones are silent. Extinct camels, horses, and giant tortoises wander no more.

The powers of wind and rain which have sculpted the landscape yield to modern men sculpting their contemporary desires on the playa surface and surrounding alluvial plains. Cars, trucks, and machines the size of ancient dinosaurs roam the landscape in high-speed pursuit. Modern man has amalgamated the elements to the brink of nuclear destructive technology. Secular science has defined nature out of existence. We are at the dawn of a new age of extinction.

The horned lizard and desert tortoise haven't a home where man doesn't seek to destroy. Overriding considerations take precedent over creatures unable to litigate their survival. Off-set mitigation measures circumvent ethical values archaic to modern notions of progress and serve no purpose of industry except to foil their designs with compassionate debate. Significant adverse, unavoidable impacts can be corrected simply by the insertion of the word "No" at the beginning as long as it's done by a trained, qualified, professional expert. The word "professional" has become synonymous with paid liar. Expert testimony is for sale and neutralizes truthful debate. Campaign contributions are the projects dynamo.

Conservative assumptions in engineering calculations relying on unproven technologies are false assurances that corrective actions or mitigation is possible once disaster and contamination happens. There is no way to mitigate destruction. Overriding considerations and approval of mitigation measures of unproven technological designs for corrective action of unmitigatable disasterous consequences is lawlessness.

Resolving public concerns with false conclusions digresses from proper regulatory and permitting processes with calculated deception clearly transgressing with wanton disregard the charter of government's own existence. It is an insult to the intellect and reasoning capabilities of ordinary concerned citizens with reasonable sensibilities to suggest that this proposal to dump massive quantities of garbage in an area of such rich resource abundance could possibly be safe and environmentally sound and is pure lunacy. ① CONT.

DEVELOPMENT CODE/RESOURCE PRESERVATION
85.030101 et seq.

Addressing the majority of negative impacts adverse to the project site of despoilation and general region in a whole context are the Articles contained in Chapter 3 of the Development Code, Resource Preservation.

Articles:
1. Agricultural Preserve (AP) Overlay District.
2. Biotic Resources (BR) Overlay District.
3. Cultural Resource Preservation (CP) Overlay District.
4. Mineral Resources (MR) Overlay District.
5. Paleontologic Resources (PR) Overlay District.
6. Scenic Resources (SR) Overlay District.

The First Article states that the preservation of agricultural land is essential to the economic well being of the County. Development standards state that "garbage dumps" are not compatible with agricultural development due to health and safety issues, vector control problems, and is especially true if imported garbage were infested with numerous quarantined plant diseases, insects and/or insect larvae.

② Completely unaddressed in the Supplement and Draft EIR/EIS are the problems associated with garbage wastes transported into the County from regions under quarantine for insect infestation. For example, Los Angeles and Orange Counties were previously under quarantine due to infestation of Mediterranean fruit fly (Title 3 CCR § 3406 Quarantine Regulation 7). There are many other quarantine regulation areas throughout the southland and Southern California region established for pest, hosts, and possible carriers.

The problem is one of vector control verses toxic pollution. Household wastes generated in the State of California, according to the California Integrated Waste Management Board, is seven percent food waste. This percentage would rise after leaving the proposed Materials Recovery Facility and would most certainly contain specified fruits on the quarantined list which are prohibited by law from being transported outside the area under quarantine restriction.

If the garbage were treated to insure vector control prior to transport out of the quarantine area by fumigation of chemical methods, the importation of this type of poisoned garbage into our clean and pristine desert environment would clearly escalate the hazards to groundwater, and would substantially increase air quality degradation already predicted to be an unavoidable adverse impact.

② CONT.

We do not beg for adverse industry to come into our clean desert environment. The importation of garbage and waste generated outside the County is an offensive act of despoilation, and the possibility of these garbage wastes infested with plant disease, insects and larvae specified in various quarantine regulations would violate the law, and adds insult to injury. Finally, if the waste mass were treated chemically to kill off organisms this would dangerously escalate impacts on air, land, and water, and impact adversely the quality of the human environment.

The Second Article addresses the biotic resources where the protection and conservation of rare, unique, threatened, or endangered plant and animal resources and their habitats is the intent of the law. At least one rare sensitive plant species, Crucifixtion thorn (Castela emoryi) was noted 5 miles east of Amboy at Bolo Station by the CDFG Natural Diversity Database, 4.4.6 Draft EIR/EIS. However, this plant was not listed in Appendix G Draft EIR/EIS.

The horned lizard is another creature on site who is rare, threatened, and endangered. Further, low to medium densities of desert tortoise (Gopherus agassizii) live in the project area and should be considered viable critical habitat. Now that critical habitat has been designated for the desert tortoise, the Biological Opinion included in the Supplement to the Draft EIR/EIS appears to be more absurd than ever.

③

> "Critical habitat has not been designated for the Mojave population of the desert tortoise in California; therefore, no critical habitat will be affected by the proposed action."
> "The Bureau considers the project site as catagory 3 desert tortoise habitat which is characterized by low to medium densities of desert tortoise (Bureau 1992)."
> "Implementation of the proposed action would not affect desert tortoise habitat."
> "The area which would be disturbed by the project is not considered desert tortoise habitat."

This Biological Opinion by the United States Department of the Interior, Fish and Wildlife Service, Ecological Services, Ventura Field Office, needs further clarification because of the numerous contradictions in the text of the opinion. Class I desert tortoise habitat has now been established. Ravens at landfills are a common sight and with a flight range of 30 miles would adversely impact the Class I desert tortoise habitat which is only five miles from the proposed garbage dump.

The Third Article Sections 85.030301 et seq., Development Code, deals with Cultural Resource Preservation. The identification and preservation of important archaeological sites is necessary as many such resources are unique and nonrenewable. The proposed action will destroy over twenty known and documented pre-historic archaeological sites that according to the Archaeological Information Center, San Bernardino County Museum, have not been adequately inventoried. The potential for presence of cultural resources is high.

④

Once the cultural resource is destroyed scientific retrievability is lost forever. Federal law codifies the protection of historical and cultural properties [36 CFR § 800 et seq.]. Section 106 of the National Historic Preservation Act requires to the maximum extent possible planning and actions as may be necessary to minimize harm to cultural resources. The Section 106 process presented in the Draft Supplement EIR/EIS did not conform to the provisions pursuant to 36 CFR §800 et seq.

In 1980 the proposed project area was nominated an area of Critical Environmental Concern in the CDCA because of its cultural and pre-historic relevance and importance. Nine square miles were identified including a three mile long and one mile wide dune sand deposit which is the natural repository of pre-historic artifacts.

The area has been identified as having sacred and secular value to Native Americans and approximately 75 to 80 percent of the archaeological property is situated on the site of the proposed "mega garbage dump." The nomination of ACEC was rejected on the rationale that there appeared "no significant threat to the resource at that time," and "the ACEC designation would increase risk to the resource," and "the area was difficult to manage because of size and topography."

⑤

The conclusions drawn in the Supplement Draft EIR/EIS of no significant adverse effect upon these cultural properties when their use is proposed as landfill cover is not true. We request that the Advisory Council on Historic Preservation review the findings in accordance with 36 CFR §800.6 (e).

The destruction of known archaeological sites for use as landfill cover does not support the finding of no adverse effect upon these cultural properties merely because these sites have not been included in the National Register nor does it relegate their destruction to a level of non-significance under 36 CFR §800.4 (c) (1).

⑥

In assessing the effects the proposed action will have upon cultural resources known to exist which includes the total destruction of pre-historic properties [36 CFR §800.5 (c)], when an effect is found, the Criteria of Adverse Effect 36 CFR §800.9 (b) shall be applied. Further, when the effect is adverse, such as using pre-historic archaeological sites for landfill cover at garbage dumps, the Agency Official shall notify the Council and shall consult with the State Historic Preservation Officer to seek ways

⑦

to avoid or reduce the effects on historic properties [36 CFR § 800.5 (e) et seq.].

⑦ CONT. In evaluating the resource significance pursuant to 36 CFR § 800.4 (c), "The passage of time or changing perceptions of significnace may justify reevaluation of properties that were previously determined to be eligible or ineligible."

Clearly the law mandates the protection of pre-historic resources and cultural properties and a "no adverse effect" finding in the Draft Supplement EIR/EIS based upon ineligibility for inclusion in the National Resgister of Historic Properties does not support the conclusion that their destruction is non-significant.

⑧ The Draft EIR/EIS and Supplement must state and enumerate the destruction of cultural pre-historic properties and archaeological sites as an adverse effect upon these properties when they are proposed for use as landfill cover for garbage dumps. This is more commonly known as criminal cultural vandalism.

⑨ Field observation reveals many of these archaeological sites and cultural resources have been disturbed and/or destroyed during the preparation of the Draft EIR/EIS by site analysis due to well drilling and boring tests, trenching, site preparation and road construction throughout the project area. Under Federal statutes this would subject all exploratory equipment used in the desecration of these cultural properties to forfeiture. (See Forfeitures, Vol. I, Introduction to Civil Statutes, Asset Forfeiture Office, J 1.2:F 76/3, Archaeological Resources)[16 USC §§ 470 aa-470 ll].

⑩ Article 4, Development Code/Resource Preservation, states that the extraction of mineral resources is essential to the economic well-being of the County and the needs of society. Mineral Resources Overlay Districts are created to protect these resources for present and future extractions. The intent of the law is to prohibit land uses in these districts which are incompatible with mineral recovery operations.

Potential gas and leachate migration and its impact on brine quality addressed in the Supplement to the Draft EIR/EIS tacetly admits the probability of contamination of these resources.

The obvious question in the mind of the concerned public is if the plastic liners are not going to leak as the proponent claims, then why all the discussion about the grout curtain cutoff wall and remedial installation of liquid and/or gas extraction wells? These are not worse case scenarios but rather inevitable and unavoidable consequences. Why contamination of the brine resources will occur leads to a discussion of the inadequate site analysis, or rather, faulty site analysis (stress the word fault).

⑪ Inadequate site characterization is a blueprint for disaster. Visual evidence of faulting on the surface landscape near the proposed site of despoilation along the western edge of section 29 parallels the groundwater divide/barrier known to cross the project site trending northwest to southeast common to all major faulting known in the region between the Garlock and San Andreas faults.

The groundwater barrier/divide depicted on pages 4.4-17 and 4.4-33 of the Draft EIR/EIS which cross the project site and the inadequade discussion in the Supplement to the Draft page 4.1-3 of the north-south trending feature or lineament observed on aerial photographs and site reconnaissance, do not support the conclusions of no faulting on or near the project site. The relationship of the Bristol Mountains to the north and the Calumet Mountains south would indicate a major subsurface feature lineament supported by visual surface features and hydrologic studies. Groundwater barriers are known as faults.

This indicates that site characterization was not based on geology but rather geography. Site characterization and siting criteria is a process of defining convenience for garbage dumpers who need easy access along railroad tracks near sand dune deposits. Even the alternative site at Cadiz fits the same siting criteria, i.e., easy access near railroad tracks adjacent dune sand deposits.

⑫ The need for a supplement to the original draft addresses the inadequacies proffered in the original document. Changes in the liner system from one document to the next demonstrates the shortsightedness of planners. Elimination of the clay liner was due to calculation failures accurately estimating the enormous quantity of materials and the expense of high grade clay. Dumpers now state that two plastic liners will be used, as if two leaking plastic liners are better than one. Expert testimony on liner failure is well documented by G. Fred Lee.

⑬ Massive drawdown of the watertable is an unavoidable impact. Ground subsidence up to 15 feet is predicted to occur across the project site. The huge quantities of water needed for fugitive dust control, construction and operations, combined with the massive and compressive forces of the waste piles, would cause uneven ground subsidence breaching the integrity of the liner system and gas/leachate collection systems.

⑭ Breaches in the plastic liner system will render the gas and leachate collection systems futile as the leachate filth migrates a toxic plume under the project site into the shallow water below. Once groundwater contamination occurs underneath the massive waste piles, remediation and corrective mitigation of this disaster would proceed in a manner not yet defined or designed. Resolving groundwater contamination concerns on paper are false assurances that remediation and clean-up of toxic garbage leachate beneath the waste piles and in the groundwater below is actually possible.

Article 5. Paleontological Resources (PR) Overlay District. Paleontologic resources are known to exist on the project site proposed for the Bolo Station "mega garbage dump." As of yet the County does not have a Despoilated Resource (DR) Overlay District, but apparently it would include the desert region and basins for future despoilation. As with the other resources, such as cultural properties and archaeological sites, sacrifice is the contents of mitigation.

⑮ The Draft and Supplement EIR/EIS has failed to adequately address scientific and intellectual concerns about the destruction of nonrenewable paleontologic resources nor describe their destrction as a significant adverse impact. Charitable contributions to the San Bernardino area museums have quashed any outcry from the so-called "cultural elite" or intellectual community concerning the wholesale destruction scientific or cultural resources that might be of interest to academicians. Garbage dollars supporting artistic and cultural exhibitions turns trash into treasure and clothes refuse in respect. Conspicious consumption and societies hedonism paves the way for cultural vandalism with overriding considerations of the here and now with a total disregard for the past and future.

It is the specific intent of the San Bernardino's Development Code/Resource Preservation for the indentification and preservation of unique and nonrenewable resources. Merely paying lip service as tribute to the goals and policies of resource preservation and accepting destruction as the inevitable mitigation measure condems corporate and government entities to repeated folly of destructive greed.

⑯ It is predicted from surface survey of the Bolo Station area that a high potential of rare and unique fossil assemblages would be encountered during the massive grading and excavation required desecrate mile after mile of the landscape once proposed as an area of critical environmental concern. This area has now been denigrated to the level of garbage.

Sadly, what was once considered an area of critical environmental concern is now an area of proposed environmental disaster. From ACEC to "mega garbage dump" certainly reflects the political climate of environmental neglect and reflects the darker side of pompous assurances by corporations with criminal histories their concern about the environment. An insidious shadow of doubt is cast surrounding their intent and curatorial capabilities in dealing with cultural and paleontologic resources when their mitigation measures focus primarily on dumping garbage and include work-around plans so that dumping can continue unimpeded away from discovery sites. If such concern were truely expressed, decision makers would have realized early on that the Bolo Station "mega garbage dump" proposal conflicts with too many resource preservation issues and contradicts county, state, and federal goals of protecting sensitive environments. Such would be the enlightened position.

The last article of the Resource preservation Code, Article 6, provides standards for development with the intent to enhance the scenic and aesthetic resources of the County. Garbage shrouded in dollars is aesthetically appealing to the Board of Supervisors and it apparently pleases them so much interest in dumping garbage of all sorts in San Bernardino County has been offered for their approval. However, the reality of the visual nightmare of hazardous waste piles and garbage heaps the size of which would miniturize the Pharoes pyridmids will never be seen from the fifth floor of the County building in San Bernardino spewing libel and slander on the landscape of the high desert.

Garbage dumps on the mega scale of the Bolo Station proposal will permanently destroy the visual character of the site and desert locale and is considered a significant unavoidable adverse impact.

⑰ The gigantic eyesore would be there for time in perpetuity. Day by day, night by night, as the pile of filth would grow year by year, Los Angeles area smog would be slowly transported from down below to our heavenly desert skies. Impacts on air quality would grow unavoidable worse as the waste piles reach towards the sky. Landfill gas collection systems, yet to be designed, and burn-off flares added as the malignent mountains of garbage waste grow, are merely smog machines that would inundate the valley with toxic haze.

The purposed land use is land abuse. Inconsistent with the County General Plan and stated policies, a garbage dump in a once scenic corridor represents a major modification with land use classification of resource conservation and is obviously not compatable with the open space element.

The topographic change to the landscape would be so pronounced contour lines on relief maps would have to be periodically changed to conform to the ugly new reality. Amboy crater would be littered with trash when dust devils finished their deeds. The historic and Scenic Route 66 would truely be "trash alley."

SUMMARY

It is clear and evident that the proposed action is not popular with desert area residents who do not consider their home to be a wasteland for Waste Management to trash, nor the pristine air an ideal diluent for the massive emissions of air pollutants this project would produce.

⑱ Worrisome are Waste Management of North America and Atchison Topeka and Sante Fe Railroad's long history of EPA violations and creation of Superfund Sites. Irreversible and irretrivable commitment of resources and weak regulatory and enforcement of the law are primary concerns given the proponent's history of criminal environmental neglect.

The proposed action would create economic conditions which may force the closure of our local landfills and a trash monoply for the proponent. At the same time our County landfills would be forced into closure the "mega garbage dump" would destroy archaeolocic and paleontologic resources, threaten critical desert tortoise habitat and rare and sensitive plant species, degrade air quality and pollute groundwater resources, render valuable mineral resources contaminated, and would permanently impair scenic and open space resources while infringing on wilderness areas. ⑲

RAIL-CYCLE BOLO STATION LANDFILL is not a recycling design and is a project which would plunder numerous nonrenewable resources and provides no new concepts for solid waste management. It is a continuation of socio/economic environmental racism and class discrimination with negative regional adverse impacts to air, land, water, and transportation, and would charter a dangerous course for future policy regarding the importation of wastes generated outside the County's boundaries.

THEREFORE, PREMISES CONSIDERED, as concerned individuals and residents of San Bernardino County, and as members of "DERT," we recommend the project proposal and all alternatives for the depradation and despoilation of unique and nonrenewable resources be denied.

Signed: Respectfully submitted,

Ray Kirkham

Ray Kirkham, President, DERT

Lynne Shmakoff

Lynne Shmakoff, Secretary

David Sabol

Comments by David Sabol

Please note that attached hereto is DERT RESOLUTION 94-1 which addresses AB 939 and certain provisions contained with that act which facilitate the importation of waste into the County. Also attached hereto for inclusion into the Administrative Record is a copy of request that the Advisory Council on Historic Preservation review the findings contained in the Draft and Supplement EIR/EIS regarding cultural properties in accordance and pursuant with 36 CFR § 800.6 (e).

DESERT ENVIRONMENTAL RESPONSE TEAM
P. O. Box 2183, Twentynine Palms, CA 92277
(619) 361-3501 or (619) 367-1973

Resolution 94-1

A RESOLUTION OF THE DESERT ENVIRONMENTAL RESPONSE TEAM SUPPORTING AMENDMENT OF THE CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT OF 1989 TO ELIMINATE PROVISIONS CONTAINED WITHIN THAT ACT WHICH FACILITATE IMPORTATION OF MUNICIPAL SOLID WASTE INTO A JURISDICTION.

Whereas, the California Integrated Waste Management Act of 1989 is and was represented to the people of the State of California as an Act designed to curtail the generation and landfilling of municipal solid waste (MSW), and

Whereas, the alleged aim of the legislation is the protection of public health and reversal of the long-standing trend of increasing generation of solid waste and rapid depletion of permitted landfill capacity, and

Whereas, the California Integrated Waste Management Act must accrue the same benefits to all jurisdictions to which it is applied, and

Whereas, the Source Reduction and Recycling Elements of that Act contain certain language which fosters the development of mega-dumps in one jurisdiction to serve the disposal of other jurisdictions, States, and Nations, namely Section 18744 (Public Resources Code) Disposal Facility Capacity Component, and

Whereas, the formula for "Additional" capacity contains the variables "I" and "E" which are at the discretion of the local jurisdiction and which can be construed by local agencies and certain private enterprises in the solid waste transport and disposal business as permission to site and operate large dumps in certain areas over the expressed opposition of the local inhabitants of these areas,

Now therefore, let it be resolved that the Desert Environmental Response Team supports and encourages any and all efforts to amend the California Integrated Waste Management Act of 1989 to remove from all compliance formulas contained in this Act, allowances for the importation of waste for landfill disposal into any jurisdiction, and to count importation of solid waste into a jurisdiction as generation of waste.

Approved and adopted this 7th day of February by a unanimous vote of the general membership in Joshua Tree, California.

Signed and Dated

Ray Kirkham
Ray Kirkham, President, DERT

Lynne Shmakoff
Lynne Shmakoff, Secretary, DERT

DESERT ENVIRONMENTAL RESPONSE TEAM
P. O. BOX 2183
TWENTYNINE PALMS, CA 92277

18 February, 1994

Advisory Council on Historic Preservation
Old Post Office Building
1100 Pennsylvania Avenue, Norhtwest # 809
Washington, D.C. 20004

Subject: RAIL-CYCLE BOLO STATION FACILITIES ARCHAEOLOGICAL REPORT DRAFT AND SUPPLEMENT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT (State Clearinghouse No.91092020)

Dear Advisory Council:

In August 1991, the County of San Bernardino, California issued a Notice of Preparation of an Environmental Impact Report in response to an application submitted by Rail-Cycle, a private venture between Atchison, Topeka, and Santa Fe Railway Company, Inc. and Waste Management of North America, Inc. for construction of a Class III solid waste facility near Amboy, California, in the Eastern Mojave Desert region of San Bernardino County.

Seven and one-half square miles of sensitive and resource abundant landscape are proposed to be inundated with garbage from the greater Los Angeles area in a dune sand deposit adjacent to Bristol Lake. Two thousand square miles of the Mojave Desert drains into Bristol Lake. Within the networks of numerous ranges of mountains defining the greater drainage area, this salt-encrusted playa covers an area of seventy-five square miles. On the northeastern edge of this playa, an accumulation of dune sand has yielded reliable and important evidence of man's earliest occupation of the California Desert. The recorded cultural resources reflect Native American use of the area during prehistory.

A three mile long and one mile wide dune sand deposit is the natural repository of prehistoric artifacts. Approximately 75 to 80 percent of the archaeological property is situated on the site of the proposed Bolo Station mega-garbage dump which would accommodate 21,000 tons of garbage per day for a period of 60 to 100 years.

The Federal Land Policy Management Act of 1976 directed the Bureau of Land Management to develop the California Desert Area Conservation Plan. This plan was defined as a program which provides for the proper use of desert public lands and resources, while safeguarding the environment, cultural, and aesthetic values.

In 1980, the area now proposed as a garbage dump was nominated in the California Desert Conservation Area Plan as an Area of Critical Environmental Concern. The area has been identified as having secular and sacred value to Native Americans. The nomination of Area of Critical Environmental Concern for the Northeast Bristol Basin was rejected at that time on the rationale that there appeared "no significant threat to the resource at that time," and "the ACEC designation would increase risk to the resource," and "the area was difficult to manage because of size and topography." There are over twenty documented archaeological sites within the proposed project area of prehistoric relevance and cultural significance. According to the Archaeological Information Center, San Bernardino County Museum, these sites have not been adequately inventoried, and because of the cultural and prehistoric relevance and importance the potential for the presence of cultural resources is high.

The Section 106 process presented in the Draft and Supplement EIR/EIS for the proposed Bolo Station mega landfill did not adequately conform to the provisions pursuant to 36 CFR § 800 et seq. The conclusions drawn in the Supplement and Draft EIR/EIS do not support the finding of "no adverse effect" upon these cultural properties when archaeological sites are proposed for use as landfill cover.

In assessing the effects the proposed action will have upon cultural resources know to exist which includes total destruction of prehistoric properties [36 CFR § 800.5 (c)], when an effect is found, the Criteria of Adverse Effect pursuant to 36 CFR § 800.9 (b) shall be applied. Section 106 of the National Historic Preservation Act requires to the maximum extent possible planning and actions as may be necessary to minimize harm to cultural resources. When an effect is found to be adverse, such as using archaeological sites and cultural properties as landfill cover for garbage dumps, the Agency Official shall notify the Council and shall consult with the State Historic Preservation Officer to seek ways to avoid or reduce the effects on historic properties [36 CFR § 800.5 (e) et seq.].

Clearly the law mandates the protection of prehistoric resources and cultural properties and the "no adverse effect" finding in the Draft and Supplement EIR/EIS based upon ineligibility for inclusion in the Natioal Register of Historic Properties does not support the conclusion that their destruction is non-significant.

In evaluating the resource significance pursuant to 36 CFR § 800.4 (c), "The passage of time or changing perception of significance may justify reevaluation of properties that were previously determined to be eligible or ineligible."

Enclosed are related documents attached hereto for your inspection. We do not concur with the State Historic Preservation Officer and the District Manager, Bureau of Land Management, California Desert District, their findings that the federal agencies responsibilities have been fulfilled pursuant to 36 CFR 800, regulations implementing Section 106 of the National Historic Preservation Act.

WE REQUEST THAT THE ADVISORY COUNCIL ON HISTORIC PRESERVATION REVIEW THE FINDINGS IN ACCORDANCE WITH 36 CFR § 800.6 (e).

Once the cultural resource is destroyed scientific retrievability is lost forever. Federal law codifies the protection of historic and cultural properties. Both cultural and paleontologic resources abound within the undertaking's Area of Potential Effects. The focus of this project on the landscape is where the dynamic forces of time have created a virtual geologic roadmap of evolution recorded in sediments and fossiliferous skeletal remains along ancient shores from a period of great inundation in the Bristol, Cadiz, Danby trough. The late period of Pleistocene animals are ghosts gone by, yet they speak to us through the rocks about their lives and age of existence. The ancient shoreline of Bristol Lake reveals acres of lithic debris where prehistoric men and women gathered at the lakeshores edge and found secular and sacred values in the surrounding available resources. The prehistoric men no longer fashion and flake stone of jasper and agates into spear and arrow points. The hammer stones are silent. Extinct camels, horses, and giant tortoises wander no more. Such antiquity should not yield to despoilation. Please reconsider the resource significance of this unique and nonrenewable archaeological wonderland.

Signed: Respectfully submitted,

Ray Kirkham
Ray Kirkham, President, DERT

Lynne Shmakoff
Lynne Shmakoff, Secretary

David Sabol
Prepared by David Sabol

DOCUMENT S-16
DESERT ENVIRONMENTAL RESPONSE TEAM
RESPONSE TO COMMENTS

Response S-16-1

1. The commenter's opposition to the project is noted. Specific comments regarding the Draft EIR/EIS, the Supplement, and the CEQA process are addressed in the following responses to specific comments.

Response S-16-2

1. The first article from the County's Development Code referenced in this comment refers to the County's Agricultural Preserve (AP) Overlay District. Pursuant to the article, this district applied to those areas which are contained within an Agricultural Preserve as defined in the California Land Conservation Act of 1965 (Williamson Act). The Bolo Station site does not lie within the AP Overlay District. Moreover, the Development Standards in this article do not state that "garbage dumps" are not compatible with agricultural development. Instead, the Development Standards provide a list of uses within an AP Overlay District which have been determined to be compatible with an agricultural preserve. The standards do not provide any information regarding the compatibility of any uses that are outside of an AP Overlay District.

2. As described in Section 5.8.1.1.5 of the Draft EIR/EIS, vector controls would be implemented at the landfill as required by CCR Title 14. Vectors are defined as organisms, including insects such as flies and mosquitoes, which could transmit diseases from one host to another.

3. This comment expresses concern regarding the potential for transporting insects (i.e., Mediterranean fruit flies) to the area. An April 1993 report by Edwin Barnes, Ph.D., entitled *Agricultural Impact Report from the Proposed Rail•Cycle Bolo Station Landfill* (Barnes, 1993), summarizes experiences reported by researchers at California State Polytechnic University, Pomona (Cal Poly), regarding the following agricultural operations conducted in close proximity to sanitary landfills:

   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile from the 2,800 ton per day County of Los Angeles Spadra Landfill.
   - Privately owned and operated orchards situated in close proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

4. The following discussion highlights the findings of the report:

   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported insect impacts.
   - Negative effects, attributable to landfill operations or insects attracted to the area by the landfill on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

5. The following mitigation measure has been included in the Final EIR/EIS to minimize potential agricultural impacts from insects potentially transported to the site:

   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

Response S-16-3

1. As stated in Sections 4.5 and 4.6 of the Draft EIR/EIS, no threatened or endangered species were found at the proposed site. The offsite occurrence of the Crucifixion thorn (*Castela emoryi*) noted by this comment was acknowledged in the Draft EIR/EIS (Section 4.5.1). This plant, which is neither a state- or federally-listed endangered or threatened species, is not included in the plant list in Appendix G (Table G.1.), because it was not observed on the Bolo Station site.

2. The San Diego horned lizard (*Phsynosoma coronatum blainvellei), a* federal Category 2 species, was identified in the Draft EIR/EIS as included in the CDFG Natural Diversity Data Base for the study area (see Section 4.6.1 of the Draft EIR/EIS).

3. As noted in this comment, subsequent to the Biological Opinion for the desert tortoise issued by the USFWS, actual habitat for the tortoise has been established. The designated habitat is approximately six to seven miles east of the Bolo Station site and the findings and required mitigation as outlined in the opinion are still valid.

4. In consultation with BLM and USFWS, Rail•Cycle has conducted a 12-month baseline raven study that includes an area within a 30-mile radius of the proposed site. The study area, therefore, encompasses the desert tortoise habitat area, which is the subject of this comment. The study began in December 1992 and continued through December 1993. Monthly surveys documented raven (as well as other bird species) populations and usage patterns in the study area. Baseline data would be compared to data collected during operation of the proposed landfill. If comparison of data finds that ravens are attracted to the site or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented at the landfill in consultation with BLM, USFWS, and CDFG.

Response S-16-4

1. As discussed in Sections 4.10 and 5.10 of the Draft EIR/EIS, the archaeological resources on the proposed site consist of lithic scatters and isolates. These resources were mapped and the available information on the archaeological sites was recorded. In several instances, the cultural material was collected and curated. The State Historic Preservation Officer (SHPO) reviewed the documentation for cultural resources that could be affected by the proposed action and concurred with the finding of no adverse effect submitted by the BLM (see Appendix C of the Supplement).

2. The Section 106 process of the National Historic Preservation Act (36 CFR 800) was outlined in the Draft EIR/EIS (Section 5.10.5.1), and was followed as described. Since the commenter does not provide specific reasons why the process as presented did not conform to the regulations, it is not possible to respond more specifically to this comment.

Response S-16-5

1. As stated in the previous response, SHPO concurred with the BLM's finding of no adverse effect. Contrary to statement in this comment regarding the proposed site being nominated as an Area of Critical Environmental Concern (ACEC), the proposed Bolo Station site was not nominated by the BLM as an ACEC. The areas in which the proposed site is located was only considered during the CDCA planning process, but was eliminated from consideration and the initial review. In addition, only a small portion of the proposed site (i.e., approximately 320 acres in the southwest corner of the site) was considered during the initial review process.

2. As requested by this comment, the BLM has forwarded the no adverse effect documentation and the SHPO's concurrence to the Advisory Council on Historic Preservation for review.

Response S-16-6

1. As noted in Response S-16-4 the archeological resources at the proposed site were limited to lithic scatters and isolates. Based on the review of the cultural resource evaluation, SHPO found that BLM has fulfilled the federal responsibilities pursuant to 36 CFR 800 (see Appendix C of the Supplement).

Response S-16-7

1. As described in Section 4.10.2.1.2 of the Draft EIR/EIS, the significance of cultural resources in the Bolo Station site was evaluated using federal guidelines included in 36 CFR 800 and 36 CFR 60. As the lead federal agency, the BLM submitted data to the SHPO regarding the eligibility or lack of eligibility for the 22 cultural resource properties identified at the proposed site. By a letter dated April 26, 1993 (see Appendix C of the Supplement), the SHPO concurred with the BLM's determination that 21 of the cultural properties on the proposed site are not eligible for inclusion in the National Register of Historic Place (NRHP), and that one property was eligible. In accordance with 36 CFR 800, the CEQA Guidelines, and the Council of Environmental Quality's regulations for implementing NEPA, if a cultural property is not eligible for inclusion in the NRHP, a proposed action is not considered to have a significant impact on the property. Through its concurrence with the BLM's no adverse effect determination, the SHPO has agreed that the proposed action would not adversely impact cultural resources at the proposed site.

Response S-16-8

1. As discussed in Response S-16-7 above, the BLM has determined, and the SHPO has concurred, that the proposed action would not adversely impact cultural resources at the site. Through its consultant with the SHPO, the BLM has complied with its responsibilities under Section 106 of the National Historic Preservation Act.

Response S-16-9

1. As noted in the previous responses, the only onsite cultural resource which meets the criteria for eligibility for the NRHP is site SBr-2910H, a segment of the National Old Trails Road. It has been determined in consultation with the SHPO that the proposed project's effect on this site would not be adverse. There is no evidence that archaeological sites or cultural resources were disturbed and/or destroyed during site analysis for the Draft EIR/EIS.

Response S-16-10

1. The County General Plan, Mineral Overlay Districts do not include the proposed site or nearby areas. In addition, Article 4 of the County Development Code does not preclude other uses. As discussed in Section 5.3 of the Draft EIR/EIS and Section 5.3 of the Supplement, offsite mineral resources adjacent to the proposed site would be protected and can be used.

2. The analysis of a potential gas or leachate release from the landfill as part of the EIR/EIS does not "tacitly admit" the probability of such a release. Section 5.2.1.2.2 of the Supplement evaluates the potential for a gas or leachate release and the anticipated movement of such a release, if one would occur. As described in Sections 3.2.4.1 and 5.2.1.2.2 of the Supplement, the proposed composite liner system would provide redundancy to minimize any release from the landfill.

3. There is a clear distinction between "liners" and "liner systems." Two of the foremost authorities on liners conclude that releases from landfills can be controlled with a combination of liners and drainage layer, performing complementary functions (Giroud and Bonaparte, 1989). Their report makes it clear that it is inaccurate to conclude that liner systems cannot prevent water quality degradation. The findings of the Giroud and Bonaparte report were referenced in a published State Water Resources Control Board (SWRCB) technical note (SWRCB, 1992).

4. As explained in Section 5.2.1.2.2 of the Supplement, requirement of Subtitle D and CCR Title 23 include corrective action to prevent movement beyond the boundary of the landfill in the event of a release to ground water. The mitigation measures, as outlined in the Draft EIR/EIS and Supplement, document these requirements.

Response S-16-11

1. The "visual evidence" of faulting referenced in this comment, located on the western edge of Section 29, south of the Cargill wells, has been designated as Lineament "A" for purposes of the Draft EIR/EIS, Supplement, and Final EIR/EIS. Chapter 4.1 of the Supplement details the geophysical survey and exploration work conducted subsequent to the Draft EIR/EIS to evaluate the potential of Holocene faulting at the site, and the potential extension of Lineament "A" towards the site. The absence of Holocene faulting beneath the site was verified by the surveys.

2. In response to comments received on the Supplement, an additional review of the origin of Lineament "A" was conducted by Gary Rasmussen, a registered geologist with expertise in seismic conditions in San Bernardino County (Rasmussen, 1994). The report on this review concluded that Lineament "A" is not fault-related, rather it is related to subsidence of the area west of the lineament, and is an old feature, originating approximately 11,000 years ago (i.e., Pleistocene epoch rather than Holocene). The County Geologist has reviewed the findings and conclusions of the report by Rasmussen (see Appendix D of this Final EIR/EIS).

3. A summary overview of the faults which could affect the project site is provided in Appendix E, Table E.2 of this Final EIR/EIS.

Response S-16-12

1. In accordance with CEQA, and as discussed in Section 1.1 of the Supplement, the Supplement was prepared to respond to various issues regarding potential environmental effects of the proposed action that were not fully addressed in the Draft EIR/EIS. The document also provides clarification of issues raised in comments to the Draft EIR/EIS.

2. Engineering refinements, such as the proposed composite liner system, are detailed in the Supplement. As discussed in Section 3.3.2.1.4 of

the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, Rail•Cycle's liner system was designed in response to consultation with the RWQCB, Local Enforcement Agency (LEA), and CIWMB, and not, as a result of a miscalculation of the volume of clay required a standard Subtitle D liner, as suggested by the comment. As described in Response S-16-10, two of the foremost authorities on liners have concluded that leakage control can result from the type of composite liner systems as proposed for the Bolo Station Landfill (Giroud and Bonaparte, 1989).

3. A detailed analysis of the evaluation of the Rail•Cycle-proposed liner system has been conducted by Rust (1993a). Also included in the Rust report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned at 0.003 to 0.6 gallons acre/year, depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

Response S-16-13

1. Each of the issues identified in this comment are thoroughly addressed in the Supplement. The maximum ground settlement of 15.6 feet which could occur based on conservative assumptions would be at the southwest corner of the site. This is not "predicted to occur across the project site." This estimate includes the impacts of landfilling and ground water pumping. Estimated water quantities for onsite use are detailed in Section 5.2.1.2.1 of the Supplement. The potential for liner failure due to ground subsidence is discussed in Section 5.1.1.2.3 of the Supplement. As concluded in this section, the combined impact of ground settlement resulting from soil consolidation caused by the additional loading of the foundation soils by the landfill, and by the withdrawal of ground water would not be significant.

Response S-16-14

1. The potential of gas and leachate migration would be minimized by the numerous safeguards incorporated into the design of the landfill (leachate collection system, landfill gas collection system, composite liner system and the UZM system). As quantified in the Supplement (Section 5.2.1.2.2), a release at the boundary of the landfill footprint would take over 10 years to travel the 750 feet to the project boundary. Based on the early detection system offered by the UZM system, mitigation measures to remediate any detected release could be undertaken long before downgradient contamination could occur.

Response S-16-15

1. Because this comment does not specifically explain the reasons that the Draft EIR/EIS and Supplement have inadequately addressed paleontological resources, a specific response is not possible. Mitigation measures, as outlined in Section 5.11.5.1 of the Draft EIR/EIS, detail the proposed salvaging operation for potential paleontological resources at the site. The program, as proposed, shall be monitored by a qualified paleontologist, in accordance with the Mitigation Monitoring and Compliance Program.

Response S-16-16

1. As noted in Response S-16-15, mitigation measures to preserve unique fossil assemblages shall include ongoing resource evaluation, monitoring, and salvaging. Unique fossils shall be curated and permanently housed in an established museum repository.

Response S-16-17

1. The visual impacts of the proposed landfill and operation are described in Section 5.9 of the Draft EIR/EIS, and are depicted in Figures 5.9.2 and 5.9.3. A number of visual impacts associated with the landfill development were acknowledged as significant unavoidable impacts (Section 5.9.7 of the Draft EIR/EIS). This section also notes that existing vistas available from the site meet the scenic criteria of the Open Space Element of the County General Plan.

2. Litter control measures, as described in Section 5.8.1.1.5 of the Draft EIR/EIS, include a litter control team which would be in place at the landfill on a full time basis to monitor surrounding areas including roads at the landfill and the public drop-off area.

Response S-16-18

1. While this comment does not raise a specific issue regarding the information included in the Draft EIR/EIS or Supplement, the environmental

record of a project proponent may be considered by the decision makers during their evaluation of the EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resource Code. This program will assure that the mitigation measures included in the Draft EIR/EIS, the Supplement, and the Final EIR/EIS, and the conditions in the various permits are implemented.

Response S-16-19

1. As detailed in Chapter 2.0 of the Supplement, additional substantial landfill capacity is required for the southern California region in addition to available capacity at existing landfills. The commenter's general opposition to the proposed project is noted. The specific issues identified in this comment have been addressed in the other responses to this letter.

FEB 18
RECEIVED
BY

DESERT CITIZENS AGAINST POLLUTION
3813 50th Street West
Rosamond, CA 93560
805-256-2101 • 805-256-0674 fax

February 15, 1994

Dear Mr. Scott and Mr. Bisson,

Our concerns with the Railcycle project are as follows:

1. There remain significant concerns regarding hydrology. It is apparent that the project will eventually result in the contamination of the underlying aquifer asd the liner system and leachate collection system being relied upon for mitigation have a proven record of failure. The leachate from these types of landfills is similar to leachate from toxic waste landfills, according to EPA studies. Chapter 15, Title 23 of the CCR states that any waste facilities must isolate waste from groundwater resources for as long as the waste is hazardous. The proposed project cannot meet that requirement as currently designed. ①

The DEIR/S indicates that the basin beneath the proposed dump is closed. There is no evidence to support that conclusion, and in fact there is a tremendous amount of evidence to support just the opposite conclusion. Work done for the Coso Geothermal Project at the China Lake Naval Weapons Center by Dr. Carl Austin and Dr. Jim Wheelan indicate that the Eastern Mojave Desert may house a huge network of interlinking aquifers that are recharged by snowrunoff from the Sierra Nevada Mountains and eventually drain into the Colorado River. Studies done by the Mineral Information Service on Pleistocene Lakes of Southern California in the 1950's indicate that the Bristol Lake Area is a possible outlet to the Colorado River. Moreover, data cited in the draft EIR/S indicate by ADH Associates indicate hydrologic communication of the aquifers. ②

The Colorado River is the drinking water supply for over 20 million people and a crucial resource for the people of the Southwest United States and Northern Mexico. It should be noted that the waters of this river flow internationally and are therefore governed by international laws and treaties. The Colorado River is too important a resource to contaminate with toxic leachate, and before projects such as Railcycle are approved it should be proved beyond a shadow of a doubt that this project will not contaminate the River at any time in the future. ③

The proposed project combined with already proposed uses will exacerbate further overdrafting of the aquifer, and coupled with the added weight of the landfill, subsidence will occur. This subsidence will cause the liners to fail and contribute to contamination of the aquifer. This subidence and its impact on liner patency is not characterized or addressed anywhere in the DEIR/S. ④

Surface runoff will pool beneath and around the dump because of ground subsidence, creating a cone of depression filled with toxic leachate. This toxic leachate will over the leachate collection system and seep through the liners and leachate containment systems into the groundwater. This was not addressed in the DEIR/S. ⑤

2. There remain serious outstanding seismic issues. The area around Barstow, Yucca Valley, and Landers is considered by seismic experts to be an area of great activity in the future. The discussion in the DEIR/S regarding seismic hazards state that as part of the permitting process for the RWQB, further studies are required to verify "the lack of active or potentially active faults in the project area". Yet it is not only active faults that can cause liners and leachate collection systems to fail. These systems should be designed to withstand the maximum probable acceleration from the most probable seismic events. Just because no active faults are observed on the site does not mean that accelerations that will affect the patency of the ground water protection scheme will not occur.

There is evidence to support the assertion that future accelerations may exceed the 0.063g maximum recorded on December 22, 1943 (Amur, 1992) and that such accelerations could compromise the integrity of the structure to adequately contain the wastes. Moreover, the cumulative impacts of all known forces on the structure have not been adequately addressed, i.e. what will happen to the structure after ground settlement due to foundation loading, subsidence from aquifer drawdown, enhanced dessication cracking of the lakebed, liner compression and decay from loading factors and toxic leachate, and seismic hazards all occur. All of these factors will occur over time and have the cumulative effect of compromising the integrity of the containment and leachate collection systems. ⑥

3. The patency of HDPE liners cannot be relied upon to contain and isolate the waste from groundwater resources. There are ample studies indicating that these liners do not remain patent for as long as the waste presents a threat to the groundwater resources (see Waste Containment Systems: Construction, Regulation, and Performance, edited by Rudolph Bonaparte (1990), Matrecon (1988), Brown et al (1987), Lee (1991), and Geoservices (1987)). Compromised liners are not accessible to repair due to landfill cover, and cannot be remediated. The impacts of alkaline soils on the liner patency are not characteized. The use of HDPE liners is not an adequate control technology to isolate toxic leachate from this facility from the groundwater resource and should not be relied upon to do so. ⑦

4. The leachate collection system can be expected to fail long before the waste has been rendered inert. Leachate collection systems become obscured with microbial agents, clay soils, and silt and because of their location beneath the landfill are inaccessible for repair. Once such systems fail, they cannot be replaced because of the loading of the landfill. Leachate collection systems cannot be expected to protect groundwater quality. ⑧

5. There are serious air quality issues that have not been adequately addressed. High winds that occur in the area can reasonably be expected to blow trash and landfill emissions far afield. The area is already an area of non-attainment for federal air standards and increased truck traffic, PM_{10} and methane gas emissions from landfill operations will only exacerbate matters. Methane gas is a global warming gas and the impact of adding more methane and carbon dioxide from truck emissions to our air and its impacts on global climatic changes has not been addressed adequately. The impact of evaporating VOC's was not adequately addressed, nor were the health concerns of such emissions addressed. ⑨

6. The inadvertent disposal of toxic and nuclear waste, which has occurred at many landfills across the country was not adequately discussed in the DEIR/S, nor the effects of such contamination on the air, land, and water resources. ⑩

7. The siting of landfills creates a disincentive for recycling, reuse, and source reduction programs. By providing a relatively cheap method of disposal, projects such as Railcycle may actually increase the size of the waste stream. The serious environmental consequences of continued deforestation and mining operations that will accompany such increases are not addressed and are significant. ⑪

8. The DEIR/S contains an inadequate discussion of alternatives. The only alternatives that are discussed are alternative sites. NEPA, CEQA and FLPMA all demand a full and thorough discussion of alternatives to the proposed projects, not just alternative sites. Such a discussion would reasonably consider source reduction of the waste stream, reuse, recycling, and alternative technologies for adequately treating and isolating the waste from the environment. ⑫

9. The footprint of the project is inadequately described. When all factors are taken into account the footprint of this project is considerably larger than discussed in the DEIR/S. The MRF's and increased rail haul of trash through populated areas should not be excluded as part of the project. The impact of raven predation on the desert tortoise and the impact of blowing trash on surrounding ecosystems and wildlife are just two examples of the many issues that were not addressed properly in the footprint analysis. ⑬

10. The impact of the project to endangered and threatened species is not adequate. For instance, landfills attract ravens and other scavenging birds that tend to prey on species and plants when their taste for trash is exhausted. Precisely during the same time baby tortoises are out in the spring months, ravens will be searching for nesting sites and fanning out across the desert floor. Raven predation is one of two factors driving the desert tortoise to ⑭

extinction. It can reasonably be assumed that for at least a 50 mile radius around this area and possibly even farther, there will be little recruitment of tortoises into the juvenile category. The promulgation of desert landfills will undoubtedly be a significant factor in driving the remaining tortoise population to extinction. ⑭ CONT.

This site is near a proposed area of critical habitat for the desert tortoise. Certainly, siting a landfill next to critical habitat for the threatened desert tortoise is incompatible with the salvation of the species when the raven is its major predator and landfills will attract numerous ravens. The designation of critical habitat triggers that the finding of no jeopardy be reviewed by U.S. Fish and Wildlife and another consultation should be reinitiated. ⑮

11. The cumulative impacts of all human activity on the fragile desert ecosystem has not been considered. When taken along with offroad vehicle activities, mining operations and proposed mining expansions, grazing, creeping urbanization, increased tourism and recreational use, global climate change, utility cooridors, military activities, and the other proposed desert dump projects (Broadwell Toxic Repository, Hidden Valley Toxic Repository, Ward Valley Nuclear Waste Dump, Eagle Mountain Landfill, and the Mesquite Mine Landfill), Railcycle has significant impacts on the environment that are not mitigable and threaten to have severe impacts on the viability of this ecosystem. The cumulative impacts must addressed fully. ⑯

12. The efforts to address the concerns of the Native Americans associated with the site have been inadequate. The culture of these people is not amenable to the types of notice that was given them regarding their interest in this project. Efforts to ascertain the cultural value of this site to the Aha Macav (Fort Mojave), Nuwuvi (Chemehuevi), Colorado River Indian Tribes, Quechan, and Cocopah have not satisfied the legal requirements, nor the dictates that our society's conscience has to protect and nurture the tribes cultural and spiritual survival and wellbeing. This project should not proceed without culturally relevant notice and interaction with the tribes. ⑰

13. The effect of noise and light pollution on native species were not adequately addressed and will have severe, unmitigable impacts. For instance, desert tortoises communicate at low frequencies and have adapted to a very quiet noise landscape. The increased train and truck traffic will have deleterious effects on the ability to communicate with each and perpetuate their species. Light pollution will alter the circadian rhythms of species and have unknown effects that have not been adequately characterized. ⑱

14. The economic impacts of the condemnation of mineral resources beneath and surrounding the site have not been adequately addressed. The BLM has a trust responsibility to preserve and protect such rights and it is unclear how siting a landfill, designed to leak, on top of such resources fulfills this public trust responsibility. ⑲

15. The inverse condemnation of desert lands from the siting of desert dump projects has not been adequately addressed in the DEIR/S. The impact on property values, the incompatibillity of this type of land use with future development for recreation, agriculture, and urban uses is not discussed. The tendency for other projects of this nature to be sited around or near the proposed dump site is not discussed. The impacts on nearby agricultural uses has not been addressed, and the Railcycle project would have significant impacts on the farming activities in the Cadiz Valley with the importation of pests, microbes, and noxious odors. ⑳

16. The desert areas are increasingly being used for re-creation by urban dwellers who treasure an escape from city living. The visual resources of the area and the impact of the proposed project on this type of recreational use are not adequately addressed, nor is adequate weight given to this important use in the DEIR/S. ㉑

17. The poor environmental compliance record of the project proponent is not addressed and will undoubtedly have substantial impacts on the environmental compliance at this site. Waste Management, Inc. is a serial superfunder, they rank only behind the United States military in the creation of superfund sites. Railcycle will surely be their next environmental catastrophe. It does not serve the people, nor BLM's public trust responsibility, to transfer public lands to this company for the purpose of a landfill which is designed to fail and contaminate the air, land, and water ㉒

18. The cost-benefit analysis required by NEPA is inadequate. For instance, the effect of the recent Stringfellow Acid Pit decision was to squarely place liability for cleanup costs of a failed toxic waste pit on the citizens of the county and the state because they permitted and regulated the site. Certainly when Railcycle becomes the next environmental catastrophe, the cleanup costs will be enormous and have a strong deleterious effect on the financial health of the state and county. Because the Department of Interior was complicit in the development of this site and performed environmental review, it may well be that they too will be held liable for cleanup costs in the future. This really comes to the crux of the debate: Large waste corporations profit in the short term from operating the landfill and leave the inevitable future cleanup costs for the taxpayers to bear. Projects such as Railcycle are, in essence, a subsidy to waste corporations such as Waste Management, and, as such, are a tax on the citizens. ㉓

19. Closure and Post-Closure concerns are not adequately addressed and are substantial in light of new reports by the Congress' GAO that post closure funds are not available in adequate amounts to insure compliance with environmental regulations. The impacts of this fiscal reality needs to be addressed before the project moves forward. We would suggest that performance bonds be mandated for closure and post closure in adequate amounts to assure that the environment is protected for the time periods that the waste will remain an environmental hazard should the project move forward. ㉔

20. The project employs misconceptions about desert revegetation. Such revegetation has not been successful in the past and will not mitigate the impacts to the environment as discussed in the DEIR/S. ㉕

21. Significant concerns remain about long term geologic stability and the volcanic hazards of the area. Geologists indicate that this is an area of tremendous geologic change and the impacts of that change on a three square mile, 42 story tall pile of trash have not been adequately addressed. Volcanic activity could spew waste and toxic leachate for thousands of miles and create an environmental disaster, this has not been addressed adequately. ㉖

22. The effects of wind erosion have not been characterized, it is doubtful that the cap which will be relied upon to contain the waste will last long in the high winds that frequent Bolo. The wind conditions at Bolo have not be adequately characterized. Surfical stability of the cap cannot be assured with the proposed scenario. ㉗

23. There has yet to be an analysis conducted on the seismic stability of the proposed structure. A detailed slope stability analysis should be performed prior to approval of the project and include an analysis of gross stability and seismic stability. The impacts of liquefaction during the maximum credible seismic event on slope stability have not been modeled or characterized. ㉘

24. The clay and gravel borrow pits have been excluded from the environmental review process inappropriately. The mining and transporting of 13.5 million cubic yards of clay and 3.4 million yards of gravel will have a significant impact on the environment and cannot be excluded from the environmental review. The impacts to the environment of the clay borrow pit at the proposed Broadwell Dry Lake Toxic repository are included in the EIR/S. ㉙

25. The proposal to reintroduce toxic leachate into the working face of the landfill has not been approved by the appropriate agencies. The EIR indicates that "In the event reintroduction of leachate is not approved, leachate evaporation ponds would be consructed at Bolo Station." (3.2.4.2) Not to have this characterized prior to the drafting of the environmental documents is a serious flaw in the environmental analysis. Surely, the building of ponds to evaporate toxic leachate has serious and far-reaching impacts to the environment which demand an adequate and forthright characterization ***prior*** to any decision on this project. ㉚

26. This project's water usage has risen by a factor of 5 from the draft EIR/S to the supplemental DEIR/S. Yet calculations on maintaining dust control and cap patency suggest that water usage may be even higher. A finer, more accurate characterization of water usage should be done on this project, especially with the potential impacts that subsidence will have on the project and the fact that the aquifer is already in overdraft. ㉛

27. The proposal that Railcycle use HDPE as landfill cover instead of a clay cover represents a significantly different environmental scenario than the use of a clay cap. The effect this will have on slope stability and the patency of the cover is not addressed in the DEIR/S. ㉜

28. The discussion of alternatives to the project is incomplete. Only alternative sites are characterized, alternative technologies and policies are ignored. Moreover, 235 Cal. App. 3D at 786 states: ***"If various alternatives were considered and found infeasible, those alternatives and the reasons they were rejected must be discussed in the EIR in sufficient detail to enable [public participation]."*** This has not occured. Moreover, the courts have held that ***"The Board is required by Public Resurces Code Section 21081 to identify project alternatives contained in the EIR as feasible or infeasible. Further, the Board must state why the alternative is infeasible."*** 155 Cal.App.3d at 753. This has not occured. A 100% diversion of waste from landfills is technologically feasible and socially desirable, yet it has not been discussed in this DEIR/S. ㉝

29. Much of the proposed site is situated within a BLM Class L area which specifically does not allow new non hazardous waste disposal sites. Moreover, the project does not appear to be consistent with the county general plan. ㉞

30. The paleontological resources have not been characterized or considered in this DEIR/S. This needs to be remedied in the final documents. ㉟

31. Since the draft was prepared new species have been listed as threatened that may be present on the site, BLM and the county should reinitiate consultation with U.S. Fish and Wildlife. (36)

Thank you for your consideration of our comments and your kind attention this matter.

Cordially,
Jane Melanie Williams
Jane Melanie Williams
for DCAP members

cc: Secretary Bruce Babbit
Senator Barbara Boxer
Senator Diane Feinstein
Hannah Bently, DCAP Attorney
Archive

DOCUMENT S-17
DESERT CITIZENS AGAINST POLLUTION
RESPONSE TO COMMENTS

Response S-17-1

1. This comment does not provide references to support the contention that the liner system and leachate collection system have a proven record of failure, nor does it provide a reference to the EPA studies which allegedly conclude that the leachate from this type of landfill would be similar to leachate from toxic waste landfills.

2. Based on studies by two of the foremost liner authorities, the type of composite liner proposed for the Bolo Station Landfill can provide control for releases from the landfill (Giroud and Bonaparte, 1989). This report makes it clear that it is inaccurate to conclude that liner systems cannot prevent water quality degradation. The findings of Giroud/Bonaparte were referenced in a published SWRCB technical note (SWRCB, 1992).

3. A detailed analysis of the evaluation of the Rail•Cycle-proposed liner system has been conducted by Rust (1993a). Also included in the Rust report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned at 0.003 to 0.6 gallons acre/year, depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

4. Section 5.2 of the Supplement provided additional analysis regarding the potential project impact to ground water quality. Clarification regarding mitigation was also provided in this section of the Supplement, including the required separation between wastes and ground water, based on conservative soil consolidation and ground water pumping assumptions.

5. Hazardous wastes would not be accepted at the proposed landfill. Proposed operation procedures to prevent inadvertent disposal of hazardous materials were described in Section 3.3.2.4 of the Draft EIR/EIS.

Response S-17-2

1. As noted, the Draft EIR/EIS states that both the Bristol and Cadiz basins are hydrologically closed, or internally drained basins. Numerous references were provided to support the data (see Sections 4.4.2.1.1 and 4.4.2.1.2 of the Draft EIR/EIS). This information, unlike the general reference to 1950's data noted in the comment letter, is the most recent information available for the project vicinity. The Draft EIR/EIR summarized the findings of several exploration studies conducted to characterize the Bristol Basin. As concluded in the Draft EIR/EIS, the available literature and field studies completed to date indicate that generally a single aquifer exists in an unconfined condition in Bristol Basin.

2. It is assumed the commenter is referring in the last sentence of this comment to ADH Associates' letter of August 26, 1991 (see Appendix A.3 of the Draft EIR/EIS). The "hydrologic communication" mentioned in the subject letter refers to portions of the aquifer within the immediate vicinity of the site in the Bristol Basin, not to potential connections between the Bristol Basin and other ground water basins.

Response S-17-3

1. As discussed in the previous response, the Bristol and Cadiz basins are hydrologically closed. Available literature concluded that geological barriers prevent ground water flow from these basins toward the Colorado River. Additional ground water studies and modeling conducted for the project were documented in Section 5.2.1.2.2 of the Supplement, which further detailed the projected movement of a potential gas or leachate release.

Response S-17-4

1. Updated information regarding the potential overdraft of the aquifer was provided in Section 4.2.2.1 of the Supplement. Based on cumulative ground water uses, including the proposed future withdrawal of 30,000 acre-feet per year by CLC, the Supplement identified ground water withdrawal from the aquifer as an unavoidable adverse impact.

2. Section 5.2.1.2.2 of the Supplement detailed the potential ground settlement due to both the weight

of the landfill and ground water withdrawal. The potential impact of settlement on the integrity of the liner was addressed in Section 5.1.1.2.3 of the Supplement.

Response S-17-5

1. The potential of ground subsidence and differential settlement was discussed in Section 5.1.1.2 of the Supplement. As described in Section 5.1.1.2.3, no conditions have been observed at the proposed site that could cause differential settlement. Settlement in the form of "tilting" may result from different amounts of vertical settlement across a large horizontal distance, at a maximum slope of less than 0.01 (vertical:horizontal). The absence of differential settlement would preclude a surface "cone of depression," which could collect leachate from surface runoff.

Response S-17-6

1. As defined by CDMG, a potentially active fault is one for which sufficient evidence is not available, but for which it is known that the fault cuts materials 1.6 million years old or younger. An active fault is one that cuts materials 11,000 years or younger. Therefore, potentially active faults can include both inactive and active faults.

2. Table 5.2.1 of the Draft EIR/EIS summarized the maximum horizontal accelerations which could occur at the Bolo Station site resulting from the maximum probable earthquake on faults within the region. A summary overview of faulting in the vicinity of the Bolo Station site is included as Appendix E, Table E.2 of this Final EIR/EIS. This table includes faults categorized as inactive. The overview does not change the findings of the Draft EIR/EIS, which concluded that an earthquake located on the Ludlow Fault would yield the largest potential peak horizontal ground accelerations during MPE and MCE events at the site (i.e. 0.9g and 0.20g, respectively).

3. As noted in this comment, accelerations may exceed the maximum historic site acceleration of 0.063g. The stability analysis report by Rust indicates that 0.35g accelerations would not cause instabilities or unacceptable deformation of landfill elements (Rust, 1993d).

4. The cumulative impacts of foundation loading, subsidence from aquifer drawdown and potential geologic discontinuities, seismic hazards, and the ability of the liner and leachate collection systems to withstand these impacts have been addressed in Sections 5.1 and 5.2 of the Supplement.

Response S-17-7

1. The Bolo Station Landfill would not exclusively rely upon the HDPE liners to protect the ground water resources. As detailed in Chapter 3.0 of the Supplement, the proposed landfill liner is a double composite system and also includes an UZM system to provide 100 percent monitoring coverage under the liner.

2. Two of the foremost authorities on liners conclude that "since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary actions" (Giroud and Bonaparte, 1989). Their report makes it clear that it is inaccurate to conclude that liner systems cannot prevent water quality degradation.

Response S-17-8

1. As noted in the previous response, the Bolo Station Landfill would not depend on any individual system to prevent water quality degradation. As shown in Figure 3.2 of the Supplement, Rail•Cycle's proposed double composite liner includes duplicate leachate collection systems. Further, the leachate collection system is designed such that leachate would be contained in its general area of production, as shown in Figure 3.12 of the Draft EIR/EIS. Each leachate collection source would encompass about 100 acres, and the landfill design includes 21 such areas.

Response S-17-9

1. Bolo Station is located in an area that experiences lower velocity winds than various other areas in which landfills are operated without issues associated with wind erosion of daily cover or final cover. For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County, California (data from January through December 1991) is provided below:

PERCENTAGE OF HOURLY OBSERVED WIND SPEEDS

Wind Speed Higher Than:	Bolo Station	Altamont
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

The Altamont Landfill is located in an area of relatively constant wind velocity that has attracted wind powered electrical generating facilities. According to WMNA, this landfill is operated without problems associated with the wind erosion of cover material.

2. Section 5.7.5 of the Draft EIR/EIS outlined several mitigation measures which would be implemented to reduce potential wind erosion at the site. Litter control measures are detailed in Section 5.8.1.1.5 of the Draft EIR/EIS.

3. Revisions to the Draft EIR/EIS included in Chapter 4.0 of this Final EIR/EIS, clearly specify the nonattainment status of the air basins affected by the proposed project, including the recent designation of the entire SEDAB as a nonattainment area for PM_{10}. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and have concurred with the primary finding of the air quality analysis (MDAQMD, 1994). The proposed project would have a significant air quality impact of the SEDAB after mitigation, and therefore, would not be consistent with those parts of the MDAQMD's Air Quality Attainment Plan related to emission reductions for ozone precursors.

4. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

5. This comment is correct in stating that methane gas and carbon dioxide are global warming gases (greenhouse gases). An analysis of the global climatic changes as a result of the proposed action would not be meaningful. Disposal of the waste at any landfill would have methane emissions which would be similar or greater than at Bolo Station. Likewise, other disposal methods, such as incineration would produce carbon dioxide which is also a greenhouse gas.

6. Section 5.4.3.1.2 of the Supplement provided a detailed analysis of the potential emissions of VOCs from evaporation or reintroduction of collected leachate and landfill gas condensate. These source would comprise 98 percent of the proposed action's VOC emissions. As discussed in Section 5.7 of the Draft EIR/EIS, the contribution of VOC emissions to existing violations of the ozone standard in the region constitutes a significant impact.

Response S-17-10

1. As discussed in Section 5.8.1.1.4 of the Draft EIR/EIS, a comprehensive hazardous material/waste load checking program would be implemented as part of the Rail•Cycle project. Routine load checking programs would be employed at MRFs and at the landfill. Monitoring for radioactive wastes would also be conducted at the MRFs and the landfill.

Response S-17-11

1. Compliance with AB 939 requirements for recycling, reuse, and source reduction programs, is the responsibility of local jurisdictions. Part of the compliance includes assuring 15 years of disposal capacity for solid waste that cannot otherwise be diverted through source reduction and recycling. As discussed in Chapter 2.0 of the Supplement, even with full implementation of the diversion requirements of AB 939, a need will exist for substantial amounts of additional landfill capacity to serve the communities of southern California.

2. Private projects such as Rail•Cycle can assist cities and counties in meeting recycling goals through contracts that provide specific services or components within the jurisdictions AB 939 implementation program. For example, a city contracting with a Rail•Cycle MRF for processing and disposal of waste may negotiate a certain level of recovery for specific waste stream components.

3. There has been no evidence presented to support the assertion that the Rail•Cycle project would result in a disincentive for recycling, or indirectly cause continued deforestation or increased mining operations as implied in this comment.

Response S-17-12

1. Section 3.3 of the Supplement provides clarification of how alternatives to the proposed action were developed, evaluated, and selected for detailed consideration in the EIR/EIS. Section 3.3.3 specifically reviews alternative waste management practices and disposal technologies.

Response S-17-13

1. It appears that this comment uses the term "footprint" as a quasi-technical term to describe the area of the proposed project that would be affected by the actual landfill. As discussed below, contrary to the suggestion made by this comment, this EIR/EIS does not limit the analysis of impacts to the "footprint."

2. The proposed action is comprised of a landfill and rail-haul of solid waste. To enhance public understanding of how a MRF might serve the proposed action, a description of a typical MRF is provided in Section 3.2.2 of the Draft EIR/EIS. However, inclusion of this general description should not be construed to mean that construction and operation of MRFs is a part of the proposed action. To date, only the MRF in the City of Commerce has been approved. Any effort on the part of the EIR/EIS to predict where additional MRFs could be located, and to try to assess those impacts, would be speculative and misleading. CEQA and NEPA do not require speculative analysis.

3. The EIR/EIS evaluates impacts related to the transfer of solid waste by rail to the proposed landfill. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs to the proposed site were evaluated in the Draft EIR/EIS in Sections 5.7, 5.8, 5.12, and 5.13, respectively. Additional information regarding transportation and noise impacts along the rail-haul route was included in Sections 5.4 and 5.5 of the Supplement.

4. Measures which would be implemented to protect the desert tortoise and to control ravens were described in Section 5.6.5.1 of the Draft EIR/EIS. Additionally, Rail•Cycle has conducted a baseline raven study that includes an area within a 30 mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys documented raven (as well as other bird species) populations and usage patterns in the study area. Baseline data would be compared to data collected during the operation of the proposed landfill. If comparison of data finds that ravens are being attracted to the site or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented in consultation with BLM, USFWS, and CDFG.

Response S-17-14

1. As stated in Sections 4.5 and 4.6 of the Draft EIR/EIS, no threatened or endangered species were found at the proposed site. As described in the previous response, measures to protect the desert tortoise and to control raven populations would be implemented by Rail•Cycle. As stated in Section 1.1 of the Supplement, the USFWS has issued its Biological Opinion (see Appendix D of the Supplement) for the proposed action and has determined that it would not jeopardize the desert tortoise.

Response S-17-15

1. Subsequent to distribution of the Draft EIR/EIS and Supplement, the USFWS has established critical habitat for the desert tortoise (59 FR 9032, February 1994). The closest designated critical habitat to the Bolo Station is located approximately six to seven miles east of the site. The findings and required mitigation for the desert tortoise as outlined in the USFWS Biological Opinion are still valid.

Response S-17-16

1. The all-encompassing cumulative analysis suggested in this comment is beyond the scope of an EIR/EIS. CEQA does not require that cumulative impacts be analyzed in as great as detail as the effects attributable to the project alone. For each environmental category evaluated in the EIR/EIS, other projects which could incrementally result in cumulative impacts for each respective impact category have been evaluated. See Chapter 6.0 of both the Draft EIR/EIS and the Supplement for the analysis of cumulative impacts.

Response S-17-17

1. A review of Native American sacred lands inventory by the BLM revealed that no known locations of religious importance occurred within the Bolo Station site. The Draft EIR/EIS and Supplement was provided to the Native American Heritage Commission. Sufficient opportunity was provided for Native Americans to submit their input and comment on the proposed project.

Response S-17-18

1. The potential indirect impacts of noise and light on wildlife species was addressed in Section 5.6.1 of the Draft EIR/EIS. As noted in this section, biological studies of the potential effect of noise from a similar rail-haul landfill found desert tortoise not to be adversely affected by noise associated with main-line rail activities or landfill operations. Light and glare are not expected to produce significant effects on wildlife populations. Lighting would be designed to limit impacts to surrounding areas.

Response S-17-19

1. The potential project impact on both onsite and offsite mineral resources has been thoroughly investigated. Detailed evaluation and discussion was included in Sections 4.3 and 5.3 of the Draft EIR/EIS, and Sections 4.3 and 5.3 of the Supplement.

Response S-17-20

1. The topics referenced in this comment were addressed in the Draft EIR/EIS and/or Supplement. Land use compatibility issues were discussed in Section 5.14.1.2 of the Draft EIR/EIS. Contrary to the suggestion made by this comment, there is no basis for concluding that the proposed prospect would result in inverse condemnation.

2. Impacts which could potentially affect the CLC agricultural operation were addressed within each specific chapter by environmental category (i.e., ground water, nuisance control, noise, traffic, etc.). The potential effect on property values is not an impact required to be addressed by CEQA or NEPA. Socioeconomic impacts are required to be addressed only to the extent that impacts could result in direct or indirect environmental consequences. Moreover, it is beyond the scope of an EIR/EIS to speculate on future land uses which might be sited in proximity to the proposed landfill.

Response S-17-21

1. Visual impacts associated with the development of the proposed landfill were analyzed in Section 5.9 and depicted in Figures 5.9.2 and 5.9.3 of the Draft EIR/EIS. Visual impacts were acknowledged as significant unavoidable adverse impacts of the proposed action.

2. The potential impact on urban dwellers which use the desert for "recreation," is a social issue and not an environmental impact which would require assessment under CEQA or NEPA.

Response S-17-22

1. While this comment does not raise a specific issue regarding the information included in the Supplement, the environmental record of a project proponent may be considered by the decision makers during their evaluation of the EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become enforceable for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resource Code. This program will assure that the mitigation measures included in the Draft EIR/EIS, the Supplement, and this Final EIR/EIS are implemented.

Response S-17-23

1. Cost-benefit analyses are not required by NEPA and were not prepared for the proposed project. The discussion of potential economic effects in Section 5.15.1.6 of the Draft EIR/EIS present potential sources of revenues and costs that could result from construction and operation of the proposed landfill. A discussion of actual revenues/costs would be speculative at this time, due to the number of variables that could affect the outcome.

2. While not part of the EIR/EIS, the County Solid Waste Management Department is preparing a fiscal impact analysis regarding the potential fiscal impact of Rail•Cycle on the County's solid waste management system. The County's fiscal impact analysis would be considered by the County Board of Supervisors along with the information included in the EIR/EIS.

Response S-17-24

1. As specified in Section 2.6.3.3 of the Draft EIR/EIS, CCR Title 14, Division 7, requires owners/operators of landfills to provide financial assurance of their ability to pay the full cost associated with closure and postclosure.

Response S-17-25

1. The feasibility of successful site revegetation was discussed in Section 5.5.6 of the Draft EIR/EIS. Potential revegetation issues, such as topsoil erosion, can be identified and mitigated during routine monitoring of the closed portion of the landfill, as required by CCR Title 14.

Response S-17-26

1. The site-specific and regional geologic and seismic environment has been appropriately established in the Draft EIR/EIS and Supplement. The potential for volcanic eruptions, as discussed in Section 5.2.1.4 of the Draft EIR/EIS, is considered low, and would not pose potential hazards beyond the Cargill operations.

Response S-17-27

1. Bolo Station is located in an area that experiences lower velocity winds than various other areas in which landfills are operated without issues associated with wind erosion of daily cover or final cover. For example, a comparison of annual wind data collected at the proposed Bolo Station site (data from March 1991 through February 1992) and annual wind data from WMNA's Altamont Landfill in Alameda County, California (data from January through December 1991) is provided below:

   PERCENTAGE OF HOURLY OBSERVED WIND SPEEDS

Wind Speed Higher Than:	Bolo Station	Altamont
16 mph	11%	45%
22 mph	2%	17%
29 mph	0.4%	2.8%

   The Altamont Landfill is located in an area of relatively constant wind velocity that has attracted wind powered electrical generating facilities. According to WMNA, this landfill is operated without problems associated with the wind erosion of cover material.

Response S-17-28

1. A seismic stability analysis was conducted for the proposed landfill to support the RDSI. The results of the analysis were included in Appendix F of the June 1993 RDSI for the proposed landfill (Rust, 1993d).

2. As noted in Section 4.1 of the Supplement, a review of geologic/seismic data indicated that the fault with the potential for generating the highest accelerations at the proposed site is the Ludlow Fault located approximately 15 miles west of the site. The MPE and MCE at the site from a seismic event on the Ludlow Fault are 0.09g and 0.20g, respectively.

3. Notwithstanding the above MPE and MCE accelerations at the site from the Ludlow Fault, the seismic stability analysis conducted by Rust for the proposed landfill used a maximum acceleration at the site of 0.35g (Rust, 1993d). The findings of the seismic stability analysis using an acceleration of 0.35g found no instabilities or potential liner or final cover damage (Rust, 1993d).

Response S-17-29

1. As noted in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, Rail•Cycle is proposing to use a GCL rather than low permeability clay in its double composite liner system. Therefore, clay may not be required for the proposed project. However, for purposes of the EIR/EIS, and as stated in the Draft EIR/EIS and Supplement, if clay and gravel are required for the liner system, it is assumed that the clay would come from the permitted Rheox Mine near Hector, California, and that the gravel would come from a permitted quarry near Newberry Springs, California. The potential transport of clay and gravel from these sources was included in the analysis of air quality and traffic impacts in the Draft EIR/EIS. Since the clay and gravel would come from currently permitted sources, the EIR/EIS did not need to address the environmental impacts associated with the mining of these materials.

Response S-17-30

1. The impacts from the potential use of leachate evaporation ponds at the landfill should the regulatory agencies not approve reintroduction of leachate into the working face, were addressed in the Supplement. As the Supplement represented a continuation of the EIR/EIS process for the proposed project, the environmental impacts of the potential use of leachate evaporation ponds have been addressed prior to a decision being made by the CEQA and NEPA lead agencies (i.e., County Board of Supervisors and the BLM, respectively).

Response S-17-31

1. This comment does not provide any supporting information for its opinion that water usage for dust control and landfill cover potency may be higher than projected in the Supplement. The information regarding projected water usage at the proposed site (i.e., 130-acre feet per year as noted in Section 5.2 of the Supplement) represents an engineering refinement of the water usage data provided in the Draft EIR/EIS. As the comment does not provide information to support its assertion, no specific response is required.

Response S-17-32

1. The seismic stability analysis conducted for the proposed landfill referenced in Response S-17-28, was based on the proposed composite liner system and proposed composite final cover system. As noted in Response S-17-28, the seismic stability analysis found no instabilities or potential liner or final cover damage (Rust, 1993d).

Response S-17-33

1. A clarified discussion of project alternatives was provided in Chapter 3.0 of the Supplement. This discussion clarifies how project alternatives were developed, evaluated, and rejected or selected for further analysis, as well as the alternative site selection process. The operational criteria used for initial site selection are those determined by Rail•Cycle and concurred on by the County and BLM to be fundamental to successful operation of an environmentally safe rail-haul landfill. These criteria are applied objectively by the EIR/EIS to identify potential sites which have the potential to reduce or eliminate significant environmental effects of the proposed action.

2. Potential alternatives were identified based on specific siting, design and operational criteria for a rail-haul landfill. These criteria were applied to a regional map to screen out unsuitable sites. Sites that met basic siting and operational criteria then underwent a second-tier review, which evaluated site-specific environmental concerns. Based on this evaluation, specific alternative sites were selected to be evaluated in detail in the EIR/EIS. For detailed information on how alternative sites were developed, evaluated and rejected or selected for further analysis in the EIR/EIS, see Section 3.7 of the Draft EIR/EIS and Section 3.3 of the Supplement.

3. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective of the proposed action, to provide an environmentally safe landfill disposal option to southern California communities after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, which was developed in response to a request by the Los Angeles County Sanitation Districts for long-term landfill capacity, would meet that need by helping satisfy the state's requirements (mandated by AB 939) for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise feasibly be reduced at the source, recycled or composted.

4. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this issue see Section 3.3 of the Supplement.

Response S-17-34

1. As stated in Section 4.14.1.1.1 of the Draft EIR/EIS, the Land Use/Growth Management element of the County General Plan includes several policies to minimize land use conflicts between the County and other agencies that have jurisdiction over County land. These policies include two that apply specifically to the proposed action:

   - Work with BLM to eliminate conflicts between public and private lands by reducing the checkerboard pattern of ownership.
   - Facilitate public/private land exchange to eliminate the need to cross public land to reach private land.

   The land exchange that would be part of the proposed action would satisfy these two policies.

2. As stated in Section 5.14.7 of the Draft EIR/EIS, the proposed action represents a major modification of the rural "limited use" character of the project area. Section 5.14.1.2 of the Draft EIR/EIS incorrectly indicated that the proposed project would require reclassification of the land use designation of the proposed site from Resource Conservation to a land use that would allow a more intensive use of the site. If the County Board of Supervisors approves the proposed project, the County General Plan would be amended to revise the Infrastructure/Improvement Level Map and accompanying text to designate the site as the Bolo Station Landfill.

3. The County Development Code allows landfills in various land use designations, including a Resource Conservation District, under the provisions that allow other land uses based on meeting locational criteria. The use of the proposed site as a landfill appears to meet these locational criteria; however, ultimately the County Board of Supervisors would consider this issue as part of its decision on the proposed amendment of

the County General Plan that would be required for the proposed project to be permitted at the Bolo Station site. The consideration of the proposed project by the County Board of Supervisors would consider the regional perspective of the project as it relates to land use and consistency with the policies of the County General Plan.

4. A landfill at the proposed site does not meet current land use designation for the site under the existing CDCA Plan. However, the proposed land use classification issue can be resolved through land exchange and amendment of the CDCA Plan. Potential land use policy issues were determined to be mitigable and substantially less significant than land use conflicts at other potential sites in the region, including sites closer to urban areas and sites designated for protection under the proposed California Desert Protection Act.

5. Regarding the public lands proposed for exchange, Section 15, and the western one-half of 22 of the proposed site are Class L and Section 8 is Class M. As described in the Draft EIR/EIS (Sections 3.2 and 5.14), for the proposed landfill to occur, these lands would be exchanged for privately held lands near Cadiz Dunes, in Piute Valley, and Fenner Valley, which are surrounded by Class L and M lands. Once the land exchange occurred, Sections 8, 15 and the western one-half of Section 22 would be in private ownership and the Class L and M land use designations would no longer be applicable. There would not be a land use conflict in developing a landfill on these lands. In exchange, the public would receive the benefit of acquiring additional acreage of higher natural resource value and consolidating ownership of public lands.

Response S-17-35

1. Section 4.11 and 5.11 of the November 1992 Draft EIR/EIS provided a detailed analysis of the paleontological resources at the proposed site and the potential impact the proposed project would have on these resources. No additional analysis is required. Section 5.11 of the Draft EIR/EIS included specific mitigation measures to protect the paleontological resources at the proposed site.

Response S-17-36

1. This comment does not provide any supporting information regarding its assertion that new species have been listed as threatened that may be present at the proposed site. There are no threatened or endangered species within the proposed project site.

CARGILL
SALT DIVISION
7220 Central Ave.
Newark, CA 94560-4206
510/797-1820 1-800-321-1458
Fax: 510/790-8189

Federal Express

February 17, 1994

Mr. Randy Scott
Senior Planner
Environmental Team
County of San Bernardino, Planning Department
385 N. Arrowhead Ave., Third Floor
San Bernardino, CA 92415-0182

Re: Comments on Supplement to the Draft EIR/EIS Rail*Cycle Landfill

Dear Mr. Scott:

Following a review of the Supplement to the Draft EIR/EIS on the proposed Rail*Cycle mega-landfill at Bolo Station, we have concluded that the documents remain incomplete and inaccurate. The implications of such a project moving forward without adequate investigation are devastating, particularly for our food-grade brine operation located less than 400 yards from the proposed mega-landfill.

The project site is not a suitable location for a mega-landfill, and an alternate site should be proposed. The support for this conclusion is provided below and in the comments by Cargill Salt's attorneys and technical experts that will be transmitted under separate cover for your review.

The alternatives analysis is flawed

The Amboy location fails to meet Rail*Cycle's own criteria for site selection.

In particular, the Bolo Station/Amboy site does not meet one of Rail*Cycle's most basic criteria: ①

> "The site's development as a landfill must be compatible with surrounding existing and planned land uses." (page 3-13)

The Bolo Station/Amboy location does not meet this criteria for (among others) the following reasons:

- A landfill is not compatible with existing food-grade product operations directly adjacent to the landfill. Cargill's brine wells are located less than 400 yards from the proposed mega-landfill. Cadiz agricultural properties are within a mile of the site.
- The Bolo Station/Amboy location does not meet the permitted land-use designation in the California Desert Conservation Area Plan. Siting the mega-landfill in this location is contrary to BLM guidelines that specify any land exchange "should reduce conflicts in land-use patterns," not create them. This land has been designated as not suitable for solid waste disposal in recognition of the need to avoid the fragile lake bed playa and to protect existing mineral resources. ① CONT.
- The Bolo Station/Amboy location does not meet the County's buffer-zone requirement between mining sites and other uses.
- The Bolo Station/Amboy location undermines the goals of the County General Plan to protect existing mineral resources. That plan states "While most land uses have options as to the location for site development, mineral extraction is limited to sites where minerals occur. Therefore, it is important for mineral resources to be protected and managed so as not to be lost due to encroachment of incompatible land uses." In this instance, the siting of a mega-landfill is incompatible with both existing and future mineral extraction.
- Changing the designation of this site to suit a landfill turns the CEQA process upside down. CEQA dictates that avoidance is the first priority. The landfill should be moved to another location to avoid these types of land-use and mineral-resource conflicts.

Since the site did not meet the established criteria, this site should have been eliminated from consideration in the early stages. If Rail*Cycle chooses to change the criteria in mid-stream, then all other alternatives should be re-evaluated under this new criteria.

Alternatives to the proposed site were not considered thoroughly. Two potentially suitable sites were improperly rejected on the basis of incorrect or inaccurate information on land use and geology. For example, Alternative Locale I was eliminated due to land-use conflicts on the theory that it was within a California Desert Protection Act ② wilderness study area. This contention is wrong. Locale I is entirely outside any wilderness study area. Therefore, this site should be reconsidered for the landfill site. Locale G was eliminated on the theory that there are lava beds within this area. The USGS maps of the area, however, show lava beds and other volcanic rocks outside, not within, this area. Therefore, Locale G should be reconsidered. ② CONT.

Each of these alternate locations is of sufficient size to meet Rail*Cycle's needs. They have the additional advantage of being located closer to the waste source, thereby reducing the air and other impacts of the project.

Impacts to mineral resources have been inadequately investigated and characterized

The DEIS/EIR and supplement fail to adequately address impacts to mineral resources in two ways. First, the proposed BLM land exchange will eliminate the potential use of existing unique mineral resources in the project area. This site has demonstrated commercial mineral resource value as documented in the DEIS/EIR and the recent P.E. LaMoreaux drilling at the corner of the proposed landfill. The samples taken from this 350-foot well indicate brines with higher mineral concentrations than the existing brine wells operated by Cargill Salt 400 yards away. BLM also has taken samples of this brine and will confirm that minerals are present in quantities that make the statements in the supplement incorrect. ③

This new information needs to be included in the DEIR/EIS or supplement to accurately assess the mineral resource involved in the land exchange. The supplement currently states on pages 6-1 and 6-5 that there is no data to support the additional potential for mineral development. In light of the new data, that clearly is inaccurate.

Second, the documents underestimate and inaccurately portray the impacts from the landfill on the existing brine operation. No real data has been developed, only assumptions and untested theories. ④

Inadequate and incomplete geologic and engineering investigation.

Experts have reviewed the work performed to date by Rail*Cycle and have deemed it inadequate to properly assess the threshold issues at the DEIR/EIS stage. Cargill's consultants on this project have many years of experience with landfills and have particular expertise in engineering, slope stability, geology ground fissures, & faults and ground water hydrology. Their comments are provided in more detail under separate submissions. ⑤

Cargill Salt's consulting geologist has concluded the investigations have failed to adequately assess the issue of faulting and ground fissures at this site. If Lineament A identified by Rail*Cycle is a fault (as suggested in Jacob's Phase II report), this fault could result in displacement along the fault line and ground shaking in the event of an earthquake. The fissures found on the site also could be a result of buried faults or steep bedrock fronts. These features could be expected to result in a crack in the landfill liner and accelerate leakage of contaminants into the Cargill brine wells. When these types of features have been found at other sites under consideration for the development of landfills, the sites have been rejected in favor of more geologically sound locations. ⑥

Cargill Salt's consulting engineer has concluded the existing engineering investigations have not met the minimum standards of effort necessary to reliably evaluate potential impacts from the landfill for the DEIR/EIS stage. The potential for sharp differential settlement of the landfill is still unknown. Additional definition in the soil profile both vertically and laterally is needed. Current slope stability studies indicate the landfill does not meet the accepted factor of safety and could fail. Additional analysis is necessary to demonstrate these slopes will not fail. These two issues impact liner safety and increase the potential for subsequent contamination of the brine wells. ⑦

In conclusion, Rail*Cycle has yet to meet the minimum standard of effort in its site investigations, relying instead on assumption built on assumption and lending credence to the axiom "garbage in, garbage out." Unfortunately in this case, that could mean right out into Cargill Salt's brine wells.

Thank you for your attention to these comments and the comments that will be submitted by our experts. We also request that the October 21, 1993 submission be considered as part of our comments on this Supplement to the DEIR/EIS Rail*Cycle Landfill. Please feel free to contact me if you have questions about the issues I have raised.

Sincerely,

Barbara N. Ransom
Environmental Manager

cc: Henri Bisson, District Manager/BLM Riverside (sent by Federal Express)

DOCUMENT S-18
CARGILL SALT DIVISION
RESPONSE TO COMMENTS

Response S-18-1

1. The commenter is correct in noting that the criteria used by Rail•Cycle to select the Bolo Station site was different than the criteria used by the County and BLM for alternative site selection. The Bolo Station site was selected prior to the CEQA/NEPA process, based on specific siting, design, and operational requirements developed by Rail•Cycle. The alternatives were developed in consultation with the County and BLM, based on the requirements of CEQA and NEPA. As stated in Section 3.3 of the Supplement, CEQA requires that the discussion focus on alternatives capable of eliminating significant adverse environmental effects or reducing them to below a level of significance. The use of separate criteria to select the proposed site and alternatives is within state and federal environmental requirements.

2. The Draft EIR/EIS, Supplement, and this Final EIR/EIS discuss and respond to each of the issues of concern identified in this comment. Mitigation measures included in the EIR/EIS were designed to protect surrounding land uses, including the Cargill operations.

Response S-18-2

1. Based on further review, it is agreed that Alternative Locale I is proximate to the Cady Mountains WSA, but is not located within the boundary. The remaining reasons for excluding Locale I, discussed in Section 3.7.2.2 of the Draft EIR/EIS, are still valid. Alternative Locale I lacks highway access to the majority of the site, which would create additional impacts due to construction of access, and did not present the opportunity to eliminate significant impacts associated with landfill development at the Bolo Station site.

2. The comment is correct in that lava beds do not exist within the boundaries of Alternative Locale G. However, as discussed in Section 3.3 of the Supplement, lava beds (i.e., basalt flows) are mapped directly south of the site's boundary. This geologic feature defined the original southern boundary for this alternative locale, and is the reason for limited configurations for landfill development.

3. Another major geologic constraint to development of a landfill at Locale G is the Ludlow Fault which traverses the western boundary of the locale. As specified in Appendix E of this Final EIR/EIS, this fault has been classified as potentially active.

4. In summary, Locale G was excluded from further consideration based on both the geologic conditions and the fact that Rail•Cycle does not own property within this locale or any other of the locales encountered.

Response S-18-3

1. The referenced report *Hydrogeologic Evaluation of the Bolo Station Landfill Site, San Bernardino County, California* was prepared to document the studies conducted by P.E. LaMoreaux & Associates, Inc. (PELA, 1994) and is included as part of the technical references for this EIR/EIS. Although, the PELA report included some refined data, it did not alter the findings and conclusions of the EIR/EIS or the design standards used by Rail•Cycle. See Response S-20-32 for a detailed discussion of the refined information regarding mineral resources.

Response S-18-4

1. A review of Cargill's consultants and supporting reports submitted regarding the Supplement has been conducted for the preparation of this Final EIR/EIS. See Documents S-20 through S-23 for specific responses regarding the impact of the proposed action on the existing brine operations.

Response S-18-5

1. A review of Cargill's consultants and supporting reports submitted regarding the Supplement has been conducted for the preparation of the Final EIR/EIS. Specific responses to each of the letters/reports are provided in Documents S-19 through S-23.

2. The issues raised by Cargill's consultants regarding the data used to support this EIR/EIS reflect a disagreement among experts. Pursuant to CEQA, disagreement among experts does not make an EIR inadequate (Section 15151 of CEQA Guidelines). A primary purpose of the Supplement was to further evaluate issues as raised by other technical experts. Moreover, additional information and clarification is provided in this Final EIR/EIS to disclose and summarize differing expert opinions.

Response S-18-6

1. Response S-20-4 discusses the analysis of the potential for active faults or other geologic hazards at the Bolo Station site that were performed, as documented in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement. There is no evidence to indicate that Holocene faulting occurs at the proposed landfill site.

2. Based on review of fissures, it has been determined that these features are likely related to subsidence, due to a lowering of regional ground water levels caused by climatic and environmental changes through geologic time or other geotechnical conditions other than faulting. Detailed responses regarding fissures have been addressed in Document S-21.

Response S-18-7

1. The geotechnical investigations conducted to date are of sufficient detail for the level of development required by the CEQA/NEPA process. This was confirmed in a letter from the SWRCB which stated that: "...the geophysical and trench work conducted to date appears to be adequate for the intended purpose" (SWRCB, 1993). The State's Geologist further concluded that the cell excavations, as recommended, should fill in any data gaps from the preliminary investigations.

2. The geologic setting of the site was further reviewed by PELA (1994). PELA developed a general environment-of-deposition model, based on information previously collected at the site, to provide a three-dimensional picture of the geology beneath the site. The geology, as depicted in the model, was verified by PELA's field investigation and is consistent with the findings of the Draft EIR/EIS and Supplement, which indicate that there are no abrupt lithology changes across the site.

3. The settlement analysis performed, using conservative assumptions, demonstrated a settlement profile which would be approximately 0.01 (vertical to horizontal) and would not damage flexible landfill environmental control systems (e.g., flexible membrane liners, gas collector pipes) (Rust, 1993c).

4. A summary overview of faulting in the vicinity of the proposed action (see Table E.2, Appendix E of this Final EIR/EIS) supports the findings of the Draft EIR/EIS and Supplement, which concluded that an earthquake on the Ludlow Fault would yield the largest peak horizontal ground acceleration during MPE and MCE events at the site (i.e., 0.09g and 0.20g, respectively). The proposed action meets accepted safety standards and the landfill slopes are not expected to fail. A stability analysis for the proposed landfill indicated that a theoretical 0.35g acceleration would not cause instability or unacceptable deformation of landfill elements (Rust, 1993d).

5. Refer to the responses to Document S-20 for a more detailed discussion of these issues.

200 PARK AVENUE
NEW YORK, N.Y. 10166-0153
TELEPHONE (212) 878-8000
FACSIMILE (212) 878-8375
TELEX 234493 RKWUR

607 FOURTEENTH STREET, N.W.
WASHINGTON, D.C. 20005-2011
TELEPHONE (202) 434-0700
FACSIMILE (202) 434-0800

58 COLEMAN STREET
LONDON EC2R 5BE, ENGLAND
TELEPHONE 44-71-628-0101
FACSIMILE 44-71-638-2008
TELEX 884964 USLAW G

Rogers & Wells
444 South Flower Street
Los Angeles, CA 90071-2901
TELEPHONE (213) 689-2900
FACSIMILE (213) 689-2999

47 AVENUE HOCHE
75008 PARIS, FRANCE
TELEPHONE 33-1-47-63-11-00
FACSIMILE 33-1-42-67-50-81
TELEX 651617 EURLAW

53 AVENUE MONTAIGNE
75008 PARIS, FRANCE
TELEPHONE 33-1-42-25-64-45
FACSIMILE 33-1-42-89-22-03

LINDENSTRASSE 37
60325 FRANKFURT/M 1
FEDERAL REPUBLIC OF GERMANY
TELEPHONE 49-69-97-57-11-0
FACSIMILE 49-69-97-57-11-33

February 22, 1994

2612-3

BY HAND DELIVERY

Mr. Henri R. Bisson, District Manager
U.S. Department of the Interior
Bureau of Land Management
California Desert District Office
6221 Box Spring Boulevard
Riverside, California 92507-0714

Mr. Randy Scott, Senior Planner
San Bernardino County
Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, California 92415-0182

Re: **The Draft EIR/EIS For The Rail•Cycle/Bolo Station Project**

Dear Messrs. Bisson and Scott:

As you know, we represent Cargill, Incorporated ("Cargill"). Cargill has a continuing interest in the proposed Rail•Cycle Project because it owns food processing and industrial operations that may be adversely affected by the project. This letter is written to provide the Bureau of Land Management ("BLM") and the County of San Bernardino (the "County") (collectively, the "Lead Agencies") with additional comments on the Supplement to the above-referenced Draft Environmental Impact Report/Environmental Impact Statement (the "SDEIS").

I. INTRODUCTION

①

Unfortunately, the SDEIS is materially deficient in numerous substantial respects. Several of Cargill's expert consultants, namely Messrs. Morris A. Balderman, E. Douglas

---

Schwantes, Frank Hagar and Dr. Roy Shlemon,[1] are currently providing separate detailed analyses of some of the SDEIS's defects in their reports on the SDEIS.[2] This letter supplements these new comments, as well as the comments previously submitted by Cargill and this firm.

① CONT.

II. ANALYSIS

A. General Problems With The SDEIS

In addition to being rife with numerous specific defects which will be discussed below, the SDEIS suffers from general defects which render the document unsuitable for use under either the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321, et seq., or the California Environmental Quality Act ("CEQA"), California Public Resources Code §§ 21000, et seq.

---

[1] See Morris A. Balderman, "Technical Review Draft EIR/EIS Supplement Proposed Rail•Cycle Bolo Station Landfill San Bernardino County, California" [hereinafter Technical Review]; E. Douglas Schwantes, Jr., "Geotechnical Review of Reported Site Conditions Proposed Rail•Cycle Bolo Station Landfill, San Bernardino County, California" [hereinafter "Geotechnical Review"]; Frank J. Hagar, "Bolo Station Landfill-Advective Transport Model Simulation"[hereinafter "Model Simulation"]; and Roy J. Shlemon, "Review and Comments Draft Environmental Impact Report/Environmental Impact Statement: Proposed Rail•Cycle Bolo Station Landfill, San Bernardino County, California" [hereinafter "Review and Comments"]. Abbreviated resumes of each of the authors of these studies are attached hereto as Exhibits "1," "2," "3" and "4."

[2] Although the SDEIS purports to be primarily addressed to geologic, hydrologic and air quality issues, its list of preparers does not include a single geologist, hydrologist or public health professional. Rather, the SDEIS simply relies on technical reports prepared by Rail•Cycle and Rust Environment and Infrastructure, which is an affiliate of Waste Management.

1. **The SDEIS Unfairly Places Heavy Reliance On Post-Comment Period Submissions Of Rail•Cycle And Its Consultants While Ignoring Similar Post-Comment Period Submissions Of Cargill And Its Consultants****.**

Cargill is quite concerned that the SDEIS improperly relies on numerous submissions by Rail•Cycle and its consultants which were filed after the March 3, 1993 deadline for comments on the DEIS while essentially ignoring similar post-comment period submissions by Cargill and its consultants. To the extent that the SDEIS only considers one interested party's post-comment period submissions, it fails to be the impartial environmental document required by both CEQA and NEPA. After all, under NEPA, one of the central purposes of an EIS is to provide "full and fair discussion of significant environmental impacts." 40 C.F.R. § 1502.1 (emphasis added). Similarly, CEQA requires that all parties be "afforded a fair opportunity to express their views at a time sufficiently early to receive even-handed consideration on the draft and revised EIRs." Woodland Hills Residents Ass'n., Inc. v. City Counsel of the City of Los Angeles, 26 Cal.3d 938, 950 (1980) (emphasis added). Simply put, the post-comment period submissions of Cargill and its consultants were entitled to the same consideration which the Lead Agencies gave the post-comment submissions of Rail•Cycle and its consultants. ②

Indeed, in enacting NEPA, one of Congress's "paramount" goals was "to internalize opposing viewpoints into the decision-making process to ensure that an agency is cognizant of all the environmental trade-offs that are implicit in a decision." California v. Block, 690 F.2d 753, 770-71 (9th Cir. 1982) (emphasis added). Instead, in clear violation of both CEQA and NEPA, the agencies have ignored Cargill's submissions -- including the report of Professor Kirk W. Brown, one of the preeminent experts on landfill issues.[3] Thus, even assuming, arguendo, that the DEIS was a valid environmental document, the SDEIS should be re-written to give equal consideration to the post-comment period submissions of all interested parties. ② CONT.

2. **The Lead Agencies Apparently Intend To Defer Analysis Of Critical Environmental Issues Until After EIR/EIS Process****.**

In the present case, the Lead Agencies apparently intend to defer proper investigation and analysis of important environmental issues until later phases of the project after the EIR/EIS has been finalized. For example, certain important geological studies that have been recommended by the State Water Resources Control Board's geologist will apparently not be done, if they are done at all, until after the EIR/EIS has been finalized, even though further geological investigations are necessary to properly evaluate the suitability of the proposed Rail•Cycle site. See, e.g., Morris A. Balderman, Technical Review, supra, pp. 6-7; Roy J. Shlemon, Geotechnical Review, supra, pp. i-iii. ③

The apparent intention of Rail•Cycle and the Lead Agencies to defer important scientific studies which are essential to a reasoned evaluation of the proposed project and the project alternatives violates both NEPA and CEQA. See, e.g., 40 CFR §§ 1502.14, 1502.22(a-b); Sundstrom v. County of Mendocino, 202 Cal.App.3d 296, 306-07 (1988).

3. **The SDEIS Fails to Properly Analyze Alternatives To The Rail•Cycle Project****.**

Both NEPA and CEQA require the lead agencies to carefully consider the reasonable alternatives to the proposed project. See 42 U.S.C. §§ 4332(2)(C); 4332(2)(E); 40 CFR § 1502.14(a); San Bernardino Valley Audubon Society, Inc. v. County of San Bernardino, 155 Cal. App. 3d 738, 750-51 (1984). Indeed, the CEQ has described the analysis of project alternatives as "the heart of the environmental impact statement." 40 CFR § 1502.14. ④

---

[3] Moreover, the Lead Agencies' failure to prepare the SDEIS in a even-handed manner cannot be cured by revisions to the final environmental document. Cargill and other members of the public are entitled to even-handed consideration of their comments during the preparation of draft environmental documents such as the SDEIS. See Woodland Hills Residents Ass'n., 26 Cal.3d at 949-950. A decision to relegate the agencies' responses to Cargill's comments to the final document would deprive Cargill of
(continued...)

[3](...continued)
a fair opportunity to comment on those responses, give Rail•Cycle's submissions undue weight and foster post-hoc rationalizations for the conclusions reached in the defective DEIS and SDEIS.

Unfortunately, the SDEIS's analysis of project alternatives, and indeed, the Lead Agencies' whole approach to the analysis of project alternatives, are both patently inadequate. See, e.g., part B.7, infra; letter from Ms. Barbara N. Ransom to Mr. Randy Scott dated February 17, 1994. ④ CONT.

4. The Authors Of Both The DEIS And The SDEIS, Have An Impermissible Conflict Of Interest.

As we have explained in our previous correspondence dated January 31 and February 16, 1994, the Lead Agencies violated applicable law and public policy when they selected Environmental Solutions, Inc. ("ESI") to prepare the SDEIS and the underlying Draft Environmental Report/Environmental Impact Statement ("DEIS"). Whatever general qualifications ESI may, or may not, have to prepare environmental documents for the Rail•Cycle Project, it is clear that ESI cannot satisfy the conflict of interest requirements set forth in the Council on Environmental Quality ("CEQ") regulations applicable to the preparation of environmental impact statements. See 40 C.F.R. § 1506.5(c). Accordingly, both for the sake of the integrity of the environmental review process and for the sake of governmental economy, Cargill reiterates its request that the Lead Agencies disavow any reliance on the DEIS and the SDEIS.[4] ⑤

---

[4] It appears that the conclusions in the SDEIS which inexplicably underestimate the adverse environmental consequences of the Rail•Cycle Project may be due to ESI's substantial economic interest in concluding that such projects are safe.

B. Specific Problems With The SDEIS[5]

The numerous specific defects in the SDEIS include, without limitation, the following:

1. The SDEIS Fails To Properly Analyze The Mega-Dump's Impact On Ground Water Quality.

The SDEIS blithely concludes that "the proposed landfill would not impact ground water downgradient from the site." SDEIS, p. 5.2-5. Unfortunately, the conclusion is simply incorrect, and an objective evaluation of the record establishes that the Rail•Cycle Project will cause profound contamination of the ground water.[6] The only real questions (neither of which are addressed in the SDEIS) are (1) When will the dump begin to contaminate the ground water? and (2) For how many centuries will the contamination continue? ⑥

To begin with, notwithstanding the fact that the mega-dump is designed to accept municipal, rather than regulated "hazardous" wastes, it is clear that the dump will generate hazardous leachates. Scientific studies have repeatedly established that even residential garbage includes substantial quantities of household hazardous wastes (e.g., paint solvents, oils, cleaning compounds, degreasing compounds and pesticides).

---

[5] Even assuming arguendo that the SDEIS and DEIS were facially valid environmental documents, the wealth of critical scientific information presented in the expert reports of Professor Brown, Mr. Balderman, Dr. Shlemon, Mr. Hagar and Mr. Schwantes require that the documents be rewritten and recirculated for public comment as revised drafts. Cf. Portland Audubon Society v. Babbitt, 998 F.2d 705, 708 (9th Cir. 1993) (holding that BLM violated NEPA by failing to prepare a supplement to EIS in light of significant new scientific studies).

[6] The mega-dump's impact on ground water quality represents a significant environmental issue not only because Cargill uses the aquifer but because, as the SDEIS concedes, most of the ground water underlying the project site appears to be potable under the standards adopted by the State Water Resources Control Board ("SWRCB"). See SDEIS, p. 4.2-3; SWRCB Resolution No. 88-63. This concession represents a substantial departure from the misleading characterizations set forth in the DEIS. See DEIS, pp. 4.4-18 to 4.4-19.

⑥ CONT. See Kirk W. Brown & Linda Descano Nelson, An Assessment Of The Potential For Environmental Contamination By The Proposed Bolo Station Landfill, pp. 1-4 (1993);[7] W. L. Rathje, W. W. Hughes, D.C. Wilson & D.E. Nelson, A Characterization of Household Solid Waste (1986);[8] G. Fred Lee & R. Anne Jones, Groundwater Pollution By Municipal Landfills: Leachate Composition, Detection And Its Water Quality Significance, pp. 263-264 (1991)[hereinafter Groundwater Pollution].[9] Worse yet, the mega-dump will continue to generate hazardous leachates for centuries or millennia to come. Kirk W. Brown & Linda Descano Nelson, supra, at p. 4.[10]

⑦ Moreover, there is little doubt that the mega-dump will leak hazardous leachates into the underlying aquifer. For example, Professor Kirk W. Brown has prepared an independent analysis of the liner and leachate collection system for the mega-dump in which he concluded that the system will fail. To quote Professor Brown's report:

---

[7] For your convenience, a copy of Professor Brown's statement of qualifications is attached as Exhibit "5" and a copy of Professor Brown's report is attached as Exhibit "6" hereto.

[8] A copy of Professor Rathje's study is attached as Exhibit "7" hereto.

[9] A copy of Drs. Lee and Jones' paper is attached as Exhibit "8" hereto.

[10] Even assuming that a significant portion of the garbage received by Rail•Cycle is processed through Material Recovery Facilities ("MRFs"), the MRFs will not eliminate the problem of household hazardous wastes. G. Fred Lee & R. Anne Jones, Groundwater Pollution, at p. 263-264; K.W. Brown, supra, at pp. 10-11. Moreover, the proposed land exchange for the Project does not contain any restrictive covenants to ensure that the garbage received has been processed through a MRF. Thus, after BLM approves the exchange, Rail•Cycle could choose to receive garbage from anywhere in the country even if the garbage has never been sent through a MRF. Indeed, it is generally known that approximately 1% of the municipal waste stream is made up of hazardous wastes. Even if the MRFs removed 90% of these wastes (which is an extremely optimistic scenario), the dump would still contain at least 860 million pounds of hazardous wastes at the time of its closure.

> ⑦ CONT. "In summary, even with controls on municipal disposal, materials containing hazardous substances will continue to be disposed in municipal landfills and will eventually release hazardous substances - organics and heavy metals - as a result of dissolution, decomposition or degradation of containers. Although the organics will persist for centuries and the metals will never degrade, liners have a useful life on the order to twenty years or so. Thus, the hazardous substances found in leachate, VOC vapors, and biogenic gases from the Bolo Station Landfill will penetrate the primary and secondary liners and flow into the environment. In the arid climate of the site, the integrity of the cover system will be difficult to maintain, resulting in ongoing infiltration of water into the landfill. Moreover, given the size and extent of the Bolo Station Landfill and the geologic factors at the site, pre- and post-closure settlement stresses will likely be sufficient to produce failures in the cover system and the liner system, thereby creating conduits for leachate and gas flow.
>
> ⑧ "Because the proposed Bolo Station Landfill site is underlain with alluvial fan deposits consisting primarily of sand, silt, and gravel deposits (with permeabilities ranging from 10^{-3} to 10^{-6} cm/s), it has no natural soil barriers to the movement of water or gas. Thus, once the hazardous substances escape from the landfill, they will move rapidly through these deposits to the underlying ground water."

Kirk W. Brown & Linda Descano Nelson, supra, at pp. 11-12.

⑨ Indeed, the mega-dump, because of unfavorable site conditions, is much more likely to leak than a typical garbage dump. Specifically, Mr. Balderman has identified the following geological factors as potentially increasing the risk that the mega-dump will leak: "(1) foundation settlement in the soft soils near [Cargill's] brine wells, (2) differential settlement,

(3) faulting, (4) existing and potential ground fissures, and (5) local seismic shaking effects." Morris A. Balderman; Updated Summary of Geotechnical Reviews: Proposed Rail•Cycle Bolo Station Landfill, at 3-9 [hereinafter Updated Summary].[11] Based on the foregoing, Mr. Balderman concluded that: "[d]ata in the Draft EIR/EIS and the related reports show that many important issues regarding stability of the landfill liner have not been resolved, indicating that potential for leaks in the proposed [Rail•Cycle] landfill would be much greater than typically expected in a modern landfill." Id., at 1.[12] ⑨ CONT.

Nor can Rail•Cycle's monitoring reasonably be expected to detect most of the mega-dump's leaks. In particular, Rail•Cycle's proposal to periodically monitor ground water by using wells with 1000 foot centers is patently insufficient to detect most of the likely liner leaks. Drs. G. Fred Lee and R. Anne Jones, two established experts in the field, have concluded that to have a realistic chance of detecting leaks from a lined landfill, the monitoring must be done very frequently using clusters of wells screened for different depths. G. Fred Lee & R. Anne Jones, Groundwater Pollution, at pp. 268-269; see also Morris A. Balderman, Updated Summary, supra, at pp. 10-13 (analyzing a number of the problems with the ground water monitoring program); Morris A. Balderman, Technical Review, pp. 30-32; Frank Hagar, Model Simulation, supra, pp. 1-7.[13] ⑩

Obviously, Rail•Cycle's minimal ground water monitoring program falls far short of what would be sufficient to detect liner leakage.[14] Even worse, given the fact that the cone of ⑪

---

[11] A copy of Mr. Balderman's "Updated Summary" is attached as Exhibit "9" hereto."

[12] The recent reports of Mr. Balderman, Mr. Schwantes and Dr. Shlemon, which are being filed concurrently with this letter, provide additional analysis on this issue.

[13] A copy of Mr. Balderman's "Technical Review" is being filed concurrently with this letter.

[14] In the comments accompanying its February 26, 1993 letter to BLM (the "EPA letter"), the Environmental Protection Agency also objected to the extremely limited nature of the ground water monitoring program. A copy of the EPA letter is attached as Exhibit "10" hereto.

depression for Cargill's wells extends underneath the proposed mega-dump site, any detection of leaks would probably occur after Cargill's wells had already been contaminated. Nor can your agencies reasonably rely on Rail•Cycle's untested and unproven vadose monitoring system. See, Morris A. Balderman, Technical Review, supra, p. 30; Letter from Frank Hagar to Messrs. Randy Scott and Doug Romoli dated February 18, 1994.[15] ⑪ CONT.

Any potential leaks from the mega-dump are of particular concern to Cargill because Cargill operates three brine wells located less than 400 yards from the proposed mega-dump. The cones of depression of these wells actually extend under the proposed mega-dump. Therefore, "[b]rine at the wells almost certainly would be contaminated if the landfill leaks." See Morris A. Balderman, Updated Summary, supra, at 3. Any threat of contamination to Cargill's wells is especially serious because Cargill uses the wells to produce a food-grade product for food industries involved in pickling and canning, cheese making and beverage production.[16] ⑫

Furthermore, even assuming arguendo that some of the dump's leaks may not occur until after the mega-dump is closed, when the leaks occur is largely irrelevant because both CEQA and NEPA require that your agencies act to protect the environment of future generations, and there is no excuse for ignoring environmental degradation simply because some of that degradation will not occur during our generation. ⑬

In sum, the SDEIS should candidly concede that ground water contamination by the Rail•Cycle mega-dump is inevitable (indeed, it may begin shortly after the company begins dumping garbage on site) and the contamination, once started, will continue for centuries or millennia into the future. ⑭

---

[15] ESI's uncritical acceptance of Rail•Cycle's untested vadose zone monitoring system may be attributable to the fact that ESI has developed, and is apparently advocating the use of, a vadose zone monitoring system for the Mesquite Regional Landfill.

[16] Over 70% of Cargill's production of calcium chloride and all of its sodium chloride comes from these wells. Calcium chloride, Cargill's principal product, is used for both food and industrial purposes.

2. The SDEIS Fails To Acknowledge That Even Assuming, Arguendo, That The Mega-Dump Will Not Leak, The Dump May Still Adversely Affect Cargill's Brine Production.

In his Updated Summary report on the mega-dump, Mr. Balderman concludes that the project could adversely affect Cargill's brine wells by changing the local hydrogeologic conditions even if the dump does not leak. Morris A. Balderman, Updated Summary, supra, at p. 14. Mr. Balderman summarizes the relevant factors as follows:

> "Production quantities and chemistry of the brine potentially would be affected by a variety of factors related to construction and operation of the proposed landfill. These include: (1) consolidation of large volumes of soil under the proposed 2100-acre, 350 foot high landfill, (2) hydrologic changes resulting from excavating and lining the proposed landfill area and from constructing the ancillary facilities, and (3) ground-water extraction planned for operation of the landfill."

⑮

Id. Indeed, Mr. Schwantes's report indicates that Rail•Cycle's consultants may have seriously underestimated the potential for settlement underneath the mega-dump. As stated by E. Douglas Schwantes, Geotechnical Review of Reported Site Conditions Proposed Rail•Cycle Bolo Station Landfill at page 2: "The application of large LANDFILL loads have the potential for compressing the underlying brine aquifers, which would cause a reduction in well capacity."

Unfortunately, rather than carefully analyzing the foregoing factors, the SDEIS systematically understates the mega-dump's likely impact on Cargill's brine production.

3. The SDEIS's Analysis Of The Mega-Dump's Seismic Risks Is Inadequate.

⑯

The reports of Mr. Balderman and Dr. Shlemon establish that there is insufficient information to warrant the SDEIS's conclusion that the nearby faults are not potentially active. See Morris A. Balderman, Updated Summary, supra, pp. 6-7; Morris A. Balderman, Technical Review, supra, pp. iv; Roy J. Shlemon, Review and Comments, supra, pp. 2-5. Cf. SDEIS, p. 4.1-1 ("there are no active faults . . . in the vicinity of the proposed site.") These seismic factors are important in part because "[f]ault displacements under the landfill or ground movements from a nearby large earthquake could damage the liner and cause leaks." Id., at p. 6. In addition, given the unstable design of the mega-dump, a seismic event of even modest magnitude could result in slope or liner failure. E. Douglas Schwantes, Geotechnical Review, supra, pp. 1, 8.

When Waste Management commented on the draft environmental impact statement/environmental impact report for the Eagle Mountain mega-dump, Waste Management argued that "a new landfill must be designed to resist the maximum horizontal acceleration expected from a seismic event and . . . the level of analysis performed for the Eagle Mountain landfill site does not appear to address these potential concerns adequately. In particular, detailed geotechnical and seismic studies are lacking."[17] The same conclusion holds true for the studies concerning the Rail•Cycle landfill. Indeed, Mr. Schwantes's report establishes that a maximum probable seismic event would likely lead to a slope or liner failure.

⑯ CONT.

The geological hazards also pose a direct risk to the people working for Rail•Cycle. Common sense dictates that the mega-dump be sited in a place which is as safe as possible for the workers.

Given the seismic hazards and the grave consequences of an earthquake induced liner or slope failure, the Lead Agencies should reject the mega-dump and insist that Rail•Cycle choose a new site for its mega-dump that is not located near any potential earthquake faults.

4. The SDEIS Fails To Properly Analyze the Fissure Issues.

⑰

As Dr. Shlemon's report indicates, the SDEIS fails to answer a number of important technical questions related to the fissure issues. See Roy Shlemon, Review and Comments, supra, pp. 5-15. For example, Dr. Shlemon concludes, in part, as follows:

---

[17] A copy of Waste Management's September 23, 1991 comments on the draft EIS/EIR for the Eagle Mountain Landfill Project is attached as Exhibit "11" hereto.

> "Surface ground fissures occur near the southwestern and southeastern corners of the proposed landfill. Their origin, as postulated in the draft EIR/EIS, is groundwater withdrawal, ostensibly caused by existing brine wells. However, the EIR/EIS is incomplete, for there are many origins for fissures that have not been addressed, ranging from fault control to hydrocollapse of underlying sediments. Indeed, as documented in technical literature, the presence of fissures proved to be a major factor leading to the recent abandonment of a proposed waste facility in terrain similar to that of the Rail•Cycle landfill.
>
> "Unanswered fissure questions that bear on the suitability of the prposed Rail•Cycle landfill include: (1) What are the causes of the Rail-Cycle area fissures? (2) What geological processes control their linearity, their trend toward the landfill and their depth? (3) Could other surface or subsurface fissures develop during the operational lifetime of the landfill and thereby channel possible subsurface contaminant flow? (4) Can fissure occurrence and potential impact on the landfill be predicted with confidence in order to ensure public safety and protection of the environment?
>
> "Until these questions are answered by levels of geologic investigation typically performed for large-scale landfill siting, the origins of Rail•Cycle area Lineament A and fissures remain unresolved. Accordingly, the conclusions provided in the draft EIR/EIS and Supplement are inadequately supported, highly questionable, and hence insufficient to meet requirements of the California Environmental Quality Act and the Federal Environmental Policy Act."

⑰ CONT.

Id., pp. ii-iii; Morris A. Balderman, Technical Review, supra, p. 15. In sum, both the DEIS and SDEIS should be rewritten to properly analyze the fissure issues.

5. The SDEIS Fails To Properly Analyze The Impacts Of Rail•Cycle's Improper Plans For Leachate Disposal.

As we explained above, it is clear that the mega-dump will generate hazardous leachates. See, Part II(B)(1). Accordingly, a thorough evaluation of the environmental impacts of Rail•Cycle's plans for disposing the mega-dump's leachates is essential to the NEPA/CEQA process. Unfortunately, the SDEIS does not come close to adequately analyzing this important issue.

To begin with, Rail•Cycle's original plan to "recirculate" the leachate generated at the dump "by reintroduction at the active/working face" has serious environmental problems. Bolo Station Landfill: Report of Waste Discharge, p. IV-8 (May, 1993). As the EPA has noted, this intentional release of leachates into the environment may violate the EPA's part 258 liquid ban requirement. The release of leachate may also violate a host of other federal and state laws, e.g., Proposition 65, codified at California Health and Safety Code §§ 25249.5, etc., and the Comprehensive Environmental Response, Compensation, & Liability Act of 1980 ("CERCLA").. ⑱

Rather than frankly acknowledging the significant environmental problems associated with intentionally releasing the hazardous leachates into the environment and notwithstanding any risk to Rail•Cycle workers and the surrounding ecosystem, the SDEIS merely notes that leachate evaporation ponds may be developed as an alternative to "reintroduction" of the hazardous leachates into the landfill. Obviously, the creation of leachate evaporation ponds has a number of its own adverse environmental impacts (e.g., the creation of air pollution risks and a significant additional risk that the leachate, concentrated in ponds would overflow and/or leak out into the underlying aquifer).

The environmentally superior option for the disposal of leachate is to have it transported and disposed of as hazardous waste. Unfortunately, notwithstanding the obvious advantages of this alternative, the SDEIS only considers the possibility of either (1) intentionally releasing the leachates into the environment by "reintroduction" or (2) intentionally releasing the leachates into the environment by evaporation and leakage through from the leachate ponds.

6. Waste Management's Environmental Record Demonstrates The Need To Consider Project Alternatives That Do Not Involve Rail•Cycle.

The SDEIS fails to properly consider project alternatives that do not involve Rail•Cycle despite the fact that there is clear evidence in the record that Rail•Cycle may be ill-suited to develop such an environmentally momentous project. In particular, it appears probable that alternative developers would have better environmental records than Waste Management, one of the Rail•Cycle partners.

The District Attorney for San Diego has documented numerous problems with Waste Management and its affiliates' environmental record.[10] Indeed, at "least forty-five Waste Management owned or operated waste sites have been found to be out of compliance with Federal or State environmental regulations, and at least five sites have been ordered closed by regulatory agencies." For your convenience, we submit the following examples of environmental cases that have been brought against Waste Management and which we have culled from the district attorney's report: ⑲

- "In 1985, the EPA and Waste Management agreed to a consent decree involving fines of $4 million stemming from the mishandling of hazardous waste, including PCB."
- More recently, "[u]nder a settlement announced by EPA, Chemical Waste Management [a 70% subsidiary of Waste Management] will pay a record $3.75 million fine for pollution violations at its hazardous waste incinerator located on the south side of Chicago."
- "During 1986, the Wisconsin Attorney General filed suit against Waste Management, Inc. and Waste Management of Wisconsin alleging that the companies failed to comply with rules and regulations for the operation of their landfill known as Omega Hills North. The complaint alleged that nearby ground water had been contaminated by hazardous materials leaking from the landfill and that the company had a deficient ground water monitoring program. In April 1989, Waste Management, Inc., and its subsidiary entered into a stipulated judgment with Wisconsin wherein they agreed to pay fines in the amount of $800,000. This was the largest fine payment ever made in an environmental lawsuit in the State of Wisconsin." ⑲ CONT.

---

[10] A copy of the district attorney's report is attached as Exhibit "12" hereto.

Unfortunately, neither the DEIS nor the SDEIS meaningfully evaluate Waste Management's environmental record. As a result, both documents fail to apprise the public of this unique risk posed by the Project.

7. The SDEIS Fails To Properly Analyze Project Alternatives.

Although the SDEIS purports to discuss alternatives, the discussion is so artificially limited that the result (i.e., the rejection of all alternatives in favor of the project as proposed) is one which was preordained. Specifically:

- The SDEIS relied on improper criteria and inadequate data in order to exclude reasonable alternatives to the Rail•Cycle Project. The Lead Agencies improperly excluded a number of reasonable alternatives from meaningful consideration in the DEIS and SDEIS based on improper criteria and inadequate data. For example, as Mr. Balderman explains in his new report, the Lead Agencies improperly rejected alternative locales "I" and "G." Morris A. Balderman, Technical Review, supra, pp. 3-4. ⑳

  Similarly, your agencies have improperly excluded reasonable alternatives merely because the subject property was not owned by the project applicants. Cf. 46 Fed. Reg. 18026, 18027 (1981).

- The Lead Agencies failed to consider a proper range of reduced action alternatives. In direct violation of applicable case law and CEQ regulatory guidelines, the Lead Agencies chose to consider a single "reduced action" alternative rather than the required full spectrum of reduced action alternatives. In the present case, the ㉑ proposed project could easily be downsized by 10% to 90% and still constitute a significant, commercially viable, garbage dump.[19] While NEPA and CEQA arguably do not require the Lead Agencies to consider every conceivable reduced action project alternative, the agencies did have a clear obligation to consider a "reasonable number" of project alternatives which cover the "full spectrum of alternatives." 46 Fed. Reg. 18026, 18027 (1981). To paraphrase the CEQ's general counsel: An appropriate series alternatives might have included reductions of 10, 30, 50, 70 and 90 percent from the proposed project size. Id. The Lead Agencies' decision to consider only a single reduced action alternative is a clear abuse of discretion. See California v. Block, 690 F.2d 753, 768-69 (9th Cir. 1982) (holding that the Forest Service had failed to consider an adequate range of alternatives).[20] ㉑ CONT.

- The SDEIS fails to investigate a decentralized project alternative. Despite their broad statutory mandate to fully explore alternatives to the proposed project design, the Lead Agencies failed to analyze any design alternatives to the Rail•Cycle Project in depth. Among the many ㉒

---

[19] The commercial viability of smaller waste-by-rail garbage dumps appears clear. See, e.g., SDEIS, p. 2-16 (discussing the Campo and Franconia dumps).

[20] For example, one of the principal environmental impacts of the proposed Rail•Cycle Project is the mega-dump's almost certain potential to contaminate Cargill's brine wells. However, the sole reduced action considered in the SDEIS does not significantly mitigate the project's impacts on Cargill's operations because the reduced action alternative contemplates the use of the parts of the proposed Rail•Cycle Project site which are closest to Cargill's wells. In contrast, a reduced action alternative involving only Parcel 5, or even a reduced action alternative including Parcels 5, 8 and 9, might significantly mitigate the Rail•Cycle Project's adverse impacts on Cargill.

reasonable design alternatives which the Lead Agencies fail to consider adequately is the decentralized project alternative. This alternative would permit Rail•Cycle to develop, for example, Parcel 5 at the Bolo Station site and an additional parcel at each of several other sites. This would assure that the overall impact on the local environment in any one area would be reduced. Both NEPA and CEQA require that the Lead Agencies consider such a decentralized project alternative. ㉒ CONT.

- The SDEIS failed to consider the reasonable alternative of approving the Eagle Mountain mega-dump instead of the Rail•Cycle project. Given that BLM is currently considering the application for the Eagle Mountain mega-dump, it should have been obvious to the Lead Agencies that they should consider the possibility of allowing the Eagle Mountain mega-dump to proceed instead of approving the Rail•Cycle Project. At a minimum, the DEIS and SDEIS should have given the Eagle Mountain landfill full consideration as a project alternative. ㉓

- The SDEIS improperly avoids detailed discussion of the waste transformation alternative. The Lead Agencies cavalierly dismiss the waste transformation alternative to the Rail•Cycle Project. SDEIS, p. 3-1. While both waste transformation projects and mega-dumps present complex environmental problems, it appears that a properly designed waste transformation project may be less likely to create hazardous leachates than a mega-dump. Accordingly, such an alternative's potential for ground water contamination should be less than for a mega-dump. Similarly, the energy recovery aspects of waste transformation projects give them another potential advantage over mega-dumps. It is possible that the energy recovered would be sufficient to electrify the trains ㉔ transporting the garbage to the Rail•Cycle site.[21] ㉔ CONT.

Given the foregoing facts, it is clear that CEQA and NEPA both require that the Lead Agencies fully consider serious project alternatives such as the waste transformation option to provide decision makers with complete information.[22] Indeed, CEQ requires that the Lead Agencies rewrite the SDEIS and DEIS to give the waste transformation alternative, and other reasonable alternatives, a degree of analysis which is "'substantially ㉕

---

[21] Using waste transformation energy recovery to electrify some or all of Rail•Cycle's trains and/or operations holds significant promise for reducing the project's adverse environmental impacts (e.g., its air pollution impacts). The Eagle Mountain project contemplates the possible use of garbage related gases to generate electricity to power the Eagle Mountain rail line.

[22] The SDEIS categorically rules out detailed consideration of alternative disposal technologies because such "technologies could not eliminate or reduce below a level of significance the environmental effects of the proposed action." SDEIS, p. 3-21. However, as is explained above, adoption of an alternative technologies may significantly reduce or even eliminate the project's adverse impact on the air and/or ground water. Moreover, even if the alternative technology does not eliminate or reduce to insignificance a given environmental impact, the alternative should still be carefully considered if it significantly reduces the impact and is otherwise reasonable. Therefore, the SDEIS's failure to consider these alternatives in detail violates NEPA and CEQA.

As an aside, the SDEIS mentions that "substantial evidence" exists that waste transformation projects may be difficult to site, in part due to public opposition. However, neither substantial evidence of potential difficulties nor suggestions that some may consider such projects infeasible in particular locations proves that such projects are infeasible. Indeed, garbage dumps also routinely face significant public opposition, yet the SDEIS considers them to be feasible. In short, waste transformation and other alternative technologies are feasible project alternatives which the Lead Agencies had a clear duty to fully investigate.

---

similar' to that devoted to the 'proposed action'." 46 Fed. Reg. 18026, 18028 (1981); 40 CFR § 1502.14. The ultimate conclusion of this analysis may be that the waste transformation alternative, coupled with a small landfill (perhaps sited in the northern-most parcel in the Rail•Cycle Project area), may be clearly environmentally superior to a mega-dump, or in other words, the alternative may clearly be the lesser of two environmental evils. ㉕ CONT.

8. The SDEIS Fails To Properly Analyze Other Environmental Risks.

Given its enormous size, the construction and operation of the proposed mega-dump raises a multitude of other environmental risks, none of which have been adequately identified or analyzed. These risks include the following:

- The SDEIS fails to consider the adverse environmental impact of the project's MRF's. Contrary to the requirements of both NEPA and CEQA, the Draft EIR/EIS intentionally fails to examine the environmental impacts of the many Material Recovery Facilities ("MRFs") and transfer stations that Rail•Cycle plans as part of the mega-dump project. See, e.g., SDEIS, p. 3-1; DEIS, p. 1-5. This glaring omission assures that the final EIR/EIS will be incomplete and that the impacts, and especially the cumulative impacts, of the mega-dump project will be systematically understated. See, e.g., Named Individual Members of the San Antonio Conservation Soc'y. v. Texas Highway Dept., 496 F.2d 1017, 1022-24 (5th Cir. 1974) (invalidating an attempt by an agency to limit environmental review by breaking up a single project into separate pieces), cert. denied, 420 U.S. 926 (1975). ㉖
- The SDEIS improperly fails to properly analyze the risks associated with the long train trips necessary to deliver garbage to the mega-dump. Because the proposed mega-dump will be sited so far from the businesses and persons generating the garbage, the Rail•Cycle project entails countless train trips that would be unnecessary if the ㉗

project were located closer to the major urban centers Rail•Cycle plans to serve. These countless additional train trips necessarily entail a substantial increase in the risk of train accidents and waste spills. These risks should be thoroughly analyzed in the EIR/EIS for the project.[23] ㉗ CONT.

- The SDEIS failed to properly analyze the environmental impacts of landfill gas migration, air pollution or explosion. As the Lead Agencies admit, the mega-dump will generate significant quantities of garbage-related flammable or explosive gases. However, the Lead Agencies have failed to adequately analyze the environmental impacts attributable to the migration or explosion of the garbage-related gases. The significance of the Lead Agencies' failure to adequately analyze the issue is amply established given that gas migration has historically resulted in landfill fires and explosions.[24] ㉘

- The SDEIS fails to properly address the risk of inundation by Bristol Lake due to extreme annual precipitation. In general, the SDEIS fails to properly analyze the potential environmental problems which would be caused by an especially wet rainy season in the project area. For ㉙

---

[23] Recent years have seen a spate of railroad accidents in California. For example, on January 30, 1994, a train car derailed and dropped toxic chemicals into Alameda Creek; in July of 1991, a similar accident resulted in a spill into the Sacramento River.

[24] Landfill gas explosions can be extremely destructive. For example, on May 1, 1993, the Vancouver Sun reported that a methane gas explosion at a landfill in Turkey had killed at least 27 people. On January 12, 1994, the Sacramento Bee reported that a fire at the Roseville dump had burned for nearly five years. Damage to adjacent property resulting from explosions of methane gas escaping from a landfill is not covered by standard comprehensive insurance policies. See O'Brien Energy Systems, Inc. v. American Employers Insurance Co., 629 A.2d 957, 963 (1993).

example, the SDEIS fails to properly consider what the effect of a year of extreme annual precipitation would be on the mega-dump. Given the geological setting for the Rail•Cycle project, it is foreseeable that an especially wet rainy season may result in the inundation of the project site by overflows from Bristol Lake. Rather than carefully analyzing the potential for extreme annual precipitation, the SDEIS focuses on the relatively less significant problem of a catastrophic 24-hour storm event. The Lead Agencies should rewrite the SDEIS to meaningfully analyze (i) the environmental impacts of a year of extreme annual precipitation and (ii) the environmental impacts of two consecutive years of extreme annual precipitation.[25] ㉙ CONT.

---

[25] The SDEIS's limited analysis on the flooding issue focuses on the possibility of a 24-hour storm event. However, Cargill believes that the SDEIS's assumptions concerning the magnitude of a maximum foreseeable storm event are unduly optimistic. As a result, Cargill submits that the likelihood of flood erosion causing catastrophic problems at the landfill site, for example, by a flood washing hazardous leachates out of the landfill and into the underlying aquifer, is much greater than the Lead Agencies apparently believe.

III. CONCLUSION

For all the foregoing reasons, Cargill respectfully submits that the Lead Agencies should commission a new consulting firm to prepare a completely revised draft environmental impact report/environmental impact statement for the proposed Rail•Cycle Project which will bring the agencies into full compliance with both NEPA and CEQA.

Very truly yours,

ROGERS & WELLS

By
Terry O. Kelly

TOK/AJY/vd
Attachments

cc by Federal Express to:

Ed Hastey, Sacramento BLM
Deanna M. Wieman, U.S.E.P.A.
Jim Parsons, CWQCB
Robert Perdue, RWQCB
Bernie Vlach, CIWMB
Stu Clark, Rail•Cycle Project Director
Glen O'Dell, Rail•Cycle Project Manager

b:tok40031.car

LIST OF ATTACHMENTS

1. The following were attached to the February 22, 1994 letter from Rogers & Wells:
   - Professional résumé for Morris A. Balderman, Consulting Geologist.
   - Professional résumé for E. Douglas Schwantes, Jr.
   - Professional résumé for Frank Hagar.
   - Professional résumé for Roy J. Shlemon, Consulting Geologist.
   - Biographical data for K. W. Brown, Ph.D., C.P.S.S.
   - K. W. Brown Environmental Services. *An Assessment of the Potential for Environmental Contamination by the Proposed Bolo Station Landfill, San Bernardino County, California.* Prepared for Cargill Salt Company. October 20, 1993.
   - Rathje, W. L., W. W. Hughes, D. C. Wilson and D. E. Nelson. *A Characterization of Household Solid Waste*, The Garbage Project, University of Arizona, Tucson. February 3, 1986.
   - G. Fred Lee and Associates. *Groundwater Pollution by Municipal Landfills: Leachate Composition, Detection and its Water Quality Significance.*
   - Balderman, Morris A. *Updated Summary of Geotechnical Reviews Proposed Rail•Cycle Bolo Station Landfill, San Bernardino County, California.* Prepared for Cargill Salt Company. October 1993.
   - U.S. Environmental Protection Agency. Letter to Doug Romoli of the Bureau of Land Management. February 26, 1993.
   - Waste Management of North America, Inc. *Comments on the Eagle Mountain Landfill Project Draft Environmental Impact Statement/Environmental Impact Report*, State Clearinghouse No. 8908413. September 23, 1991.
   - Miller, Jr., Edwin L. District Attorney for San Diego, California. *Final Report: Waste Management, Inc.* March 1992.

2. Due to the length of these attachments they have not been reproduced as part of the Final EIR/EIS. They are included in the administrative record for the Final EIR/EIS and are available for public review at the following locations:
   - Planning Department
     San Bernardino County
     385 North Arrowhead Avenue, 3rd floor
     San Bernardino, California 92415
   - California Desert District
     U.S. Bureau of Land Management
     6221 Box Springs Boulevard
     Riverside, California 92507

DOCUMENT S-19
ROGERS & WELLS
RESPONSE TO COMMENTS

Response S-19-1

1. Responses to the letters submitted by Cargill's consultants, as noted in this comment, follow the responses to this letter.

Response S-19-2

1. In accordance with CEQA, and as discussed in Section 1.1 of the Supplement, the Supplement was prepared to respond to various issues regarding potential environmental effects of the proposed action that were not fully addressed in the Draft EIR/EIS. For example, the Supplement included a section specifically on mineral resources (see Sections 4.3 and 5.3) to provide updated material and clarification on the proposed actions potential impact on both onsite and offsite mineral resources.

2. As noted in this comment, the information in the Supplement was based in part on updated studies by Rail•Cycle and its consultants. This is appropriate for the Supplement which was not intended to provide specific responses to comments received on the Draft EIR/EIS. Responses to comments on the Draft EIR/EIS are provided in Chapter 2.0 of this Final EIR/EIS.

3. A review of the Cargill consultants letters and supporting reports submitted regarding the Supplement has been conducted for the preparation of this Final EIR/EIS. Specific responses to each of the letters/reports are provided in this Chapter, Documents S-20 through S-23. By means of this Final EIR/EIS, as well as the public hearing review process for the proposed action, the opposing views on the project have been fully disclosed and considered in compliance with CEQA and NEPA.

Response S-19-3

1. Adequate information is currently available to allow a reasoned evaluation of the proposed project and alternatives. Important scientific studies have not been deferred. As referenced in Morris Balderman's letter (see Document S-20), the SWRCB geologist recommended requiring that excavations for new or expanded waste disposal be logged under direction of a Certified Engineering Geologist (SWRCB, 1993). A mitigation to log the excavations has been included in this Final EIR/EIS. This is standard construction procedure for landfill development.

2. The SWRCB letter referenced by Mr. Balderman, also states that, "... the geophysical and trench work conducted to date appears to be adequate for the intended purpose" (SWRCB, 1993). The State's geologist further concluded that the cell excavations, as recommended, should fill in any data gaps from the preliminary investigations. Please refer to the responses to Mr. Balderman's letter (S-20) for a more complete discussion of these issues.

Response S-19-4

1. This comment concludes that the EIR/EIS's analysis of project alternatives, and the approach to the alternatives analysis is inadequate, but does not specify the reasons for this finding. A response to the issues regarding alternatives raised in the letter from Barbara Ransom of Cargill (as referenced in this comment), is included in Responses S-18-1 and S-18-2 of this Final EIR/EIS. It is not possible to respond to the general comment regarding the alternatives, since the commenter's reasons for determining the alternatives as inadequate are not provided.

Response S-19-5

1. As stated in the County's response to this commenter's January 31, 1994 letter, the County considered the potential for conflict of interest over two years ago following notice by Environmental Solutions, Inc. that it was hired by the Mesquite landfill proponents as one of the consulting firms for that project. The County determined at that time that the situation did not constitute a conflict of interest in preparing the EIR/EIS for the Rail•Cycle Landfill located in San Bernardino County under direct contract to the County Planning Department.

2. As noted in the County's response letter, the assertions by this commenter implying that the current EIR/EIS documents do not identify any "unacceptable adverse environmental impacts" is incorrect as the Draft EIR/EIS and Supplement have disclosed seven significant unavoidable impacts.

Response S-19-6

1. The complete statement on page 5.2-5 of the Supplement, as referenced in this comment, is: "The double liner system in conjunction with the unsaturated zone monitoring (UZM) system and downgradient monitoring wells, and the requirements of CCR Title 23 to implement corrective action in the event a release occurs from the landfill, assures that the proposed landfill would not impact ground water downgradient from the site." This conclusion is supported by the ground water modeling studies (Rust, 1993a), which have been summarized in the Supplement. As discussed on page 5.2-5, even given conservative assumptions for ground water movement, if a leakage were to occur at the boundary of the landfill footprint, a release would take over 10 years to travel the 750 feet to the project boundary.

2. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the landfill design includes a double-composite liner and leachate collection system that exceeds current regulatory requirements for Class III landfills under CCR Title 23, and Subtitle D. Hazardous components could represent a minor constituent of any leachate, and, in the event of a release from the landfill, would be detected by the UZM system and downgradient monitoring wells within sufficient time to allow implementation of appropriate corrective action.

Response S-19-7

1. Pursuant to CEQA, disagreement among experts does not make an EIR inadequate (Section 15151 of CEQA Guidelines). A primary purpose of the Supplement was to further evaluate issues as raised by other technical experts. Moreover, additional information and clarification is provided in this Final EIR/EIS to disclose and summarize differing expert opinions.

2. As noted in this comment, based on the numerous site-specific analyses conducted for the proposed Bolo Station Landfill, Section 5.2 of the Supplement concluded that ground water downgradient from the site would not be impacted. The Draft EIR/EIS and Supplement evaluate each of the issues raised in this comment, including the integrity of the liner, geologic issues, and settlement and subsidence.

3. Studies conducted by two of the foremost authorities (i.e., Giroud and Bonaparte, 1989) have concluded that releases from the landfill can be controlled by the type of composite liner systems proposed for the Bolo Station Landfill. This study and its findings has been recognized by the SWRCB (SWRCB, 1992).

Response S-19-8

1. The movement of a potential release from the landfill was described in Section 5.2.1.2.2 of the Supplement. Ground water within the alluvial fan flows from coarser-grained sediments located on the northern portion of the proposed landfill into finer-grained sediments located on the southern portion of the landfill. Ground water velocities are low (less than 0.5 feet per day), and it takes 30 to 60 years for ground water to migrate across the entire north-south distance of the proposed landfill footprint to the Cargill production wells (Rust, 1993c). Hazardous substances, therefore, could not move rapidly to contaminate ground water.

Response S-19-9

1. Specific responses to each of the topical issues identified in this comment, as raised by Mr. Balderman, are included in the responses to his letter in this Final EIR/EIS (see responses to Document S-20). The conclusions in the Supplement have been supported based on additional review of the geologic issues as identified by Mr. Balderman.

Response S-19-10

1. As noted in Section 5.2.2.4 of the Supplement, the final location and screened intervals for the monitoring wells would be determined at the time of installation and in consultation with RWQCB. At this time it is anticipated that the length of screened casing for each monitoring well would range between 10 and 20 feet.

Response S-19-11

1. As explained in the previous response, the final monitoring program would conform to Subtitle D and CCR Title 23, and would be refined in consultation with the RWQCB. As detailed in the Supplement (Sections 5.2.1.2.2 and 5.3.2.2) due to the extremely slow movement of a potential release, it would take over 10 years to travel the 750 feet to the project boundary. The analysis also shows that even with the effect of an increased vertical gradient caused by Cargill pumping, the release could only travel 0.8 feet downward.

2. A vadose zone monitoring program is required and would be implemented for the Bolo Station Landfill. As with the specific design for the monitoring well design, the system must be approved by permitting agencies. The UZM system, as proposed, would undergo review by the RWQCB and be modified, if necessary, to meet permitting requirements and assure adequate monitoring of the vadose zone.

Response S-19-12

1. Section 5.3 of the Supplement documents additional analyses conducted subsequent to distribution of the Draft EIR/EIS, which focused on the potential impact of the proposed landfill on brine production and brine quality at the Cargill wells. This section concluded that supplemental measures beyond those detailed in the Draft EIR/EIS were not required to protect the Cargill mineral resources.

Response S-19-13

1. Although it is not clear to what text this comment is referring, it is agreed that the potential landfill gas and/or leachate release is relevant regardless of when it is likely to occur. As described in Section 3.6.2 of the Draft EIR/EIS, the postclosure plan would assure proper monitoring and maintenance for the landfill for a minimum of 30 years after closure.

Response S-19-14

1. Ground water contamination by Rail•Cycle is not inevitable. On the contrary, as referenced in Response S-19-7, releases from the landfill can be controlled through the use of the type of composite liner system proposed for the Bolo Station Landfill (SWRCB, 1992).

Response S-19-15

1. The October 1993 summary prepared by Mr. Balderman referenced in this comment was prepared prior to the distribution of the Supplement. A careful analysis of each of the factors identified in this comment was documented in the Supplement (see Sections 5.1 and 5.2).

Response S-19-16

1. A summary overview of faulting in the vicinity of the Bolo Station site is included as Appendix E, Table E.2 of this Final EIR/EIS. This overview includes each of the faults identified in Mr. Balderman's letter (see Document S-20). Figure 5.2.1 from the Draft EIR/EIS has been refined to highlight the faults identified in Mr. Balderman's letter and is included in Chapter 1.0 of this Final EIR/EIS. As summarized in Table F.2, the Ludlow Fault, located approximately 15 miles from the Bolo Station site, represents the closest potentially active fault. The overview supports the findings of the Draft EIR/EIS and Supplement, which concluded that an earthquake located on the Ludlow Fault would yield the largest peak horizontal ground acceleration during MPE and MCE events at the site (i.e., 0.09 g and 0.20 g, respectively). Further, the stability analysis report by Rust indicates that a theoretical 0.35 g acceleration would not cause instability or unacceptable deformations of landfill elements (Rust, 1993a).

2. As included in the seismic-related mitigation measures (see Section 5.2.5 of the Draft EIR/EIS), the proposed landfill and associated structures would be designed to withstand the expected ground motions at the site. Responses to specific landfill stability issues as raised by E. Douglas Schwantes are included in response to his comment letter on the Supplement (see Document S-22 of this Final EIR/EIS).

3. In summary, the seismic analysis as described in the Draft EIR/EIS and Supplement, together with the supporting evaluation included in this Final EIR/EIS, adequately describes the seismic risk at the Bolo Station site. Moreover, is has been concluded that the proposed landfill would not be impacted by seismic activities.

Response S-19-17

1. The issues regarding fissures as identified by Dr. Roy Shlemon, have been addressed in response to his comment letter on the Supplement (see Document S-21 of this Final EIR/EIS). As noted, there are several possible origins of fissures. Based on review of the fissures, it has been determined that these features are likely related to subsidence due to a lowering of regional ground water levels caused by climatic and environmental changes through geologic time. The fissures also trend away from the site (to the northwest) beginning about one-half mile south of the site.

2. As required by the SWRCB, the mapping and logging of landfill cell excavations would provide assurances that the fissures do not extend into the site. This mapping/logging would provide data beyond the precision of geophysical surveying to enable refined assessment of any geological

discontinuities and allow landfill design modifications, if necessary. Design refinements as the result of geotechnical evaluation during construction are standard during landfill development.

3. The geologic investigations conducted at the proposed site are of sufficient detail for evaluation of potential impacts in conformance with CEQA and NEPA. The studies and mitigation as recommended in the EIR/EIS are, however, subject to review and approval to obtain various regulatory permits prior to development.

Response S-19-18

1. It is correct that Rail•Cycle's preferred option is to reintroduce leachate into the waste at the working face rather than to route these liquids to a leachate evaporation pond(s). Based on analysis conducted by Rail•Cycle, it is their engineering opinion that the proposed alternative double-composite liner exceeds the performance requirements of Subtitle D for a double-composite liner and leachate collection system if leachate is to be reintroduced into the waste column (Rust, 1993a).

2. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, approval of Rail•Cycle's proposed liner is a permitting issue involving the LEA, CIWMB, and RWQCB. As Rail•Cycle's proposed liner is expected to exceed the performance standards of the Subtitle D liner, the Draft EIR/EIS includes a mitigation measure (see Section 5.4.5) that requires installation of the proposed liner. Implementation of this mitigation measure is contingent, as are other mitigation measures on the approval of appropriate regulatory agencies. This mitigation measure has been modified in this Final EIR/EIS to indicate the Rail•Cycle's proposed liner or an equivalent liner approved shall be installed.

3. If reintroduction of leachate is not approved by the RWQCB, CIWMB, and LEA, evaporation ponds with double-composite liners would be designed and constructed to comply with RCRA Subtitle C. Since distribution of the Supplement, the proposed landfill has been refined to include lysimeters beneath the leachate collection sumps to verify the integrity of liquid containment. A mitigation measure has been included in this Final EIR/EIS (see Table S.2) and the Mitigation Monitoring and Compliance Program (see Appendix A of this Final EIR/EIS) regarding the installation of lysimeters beneath the leachate collection sumps.

4. In the event liquids are disposed in a lined evaporation pond, Rail•Cycle would have the liquids and the evaporate (sludge) analyzed in accordance with RCRA Subtitle C and California Health and Safety Code Title 22 procedures for classifying waste. If the evaporate is determined to be hazardous, the material would be handled, transported and disposed at an approved disposal facility or other approved hazardous waste treatment facility, in accordance with applicable state and federal regulations.

Response S-19-19

1. As described in Section 3.7 of the Draft EIR/EIS and Section 3.3 of the Supplement, the EIR/EIS considers a full range of reasonable and feasible alternatives to the proposed actions. It is neither a CEQA or NEPA requirement to consider alternatives which would be implemented by entities other than the project proponent.

2. The environmental record of a project proponent may be considered by the decision makers during their evaluation of the EIR/EIS. There is a regulatory framework in place that will assure that the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resource Code. This program will assure that the mitigation measures included in the Draft EIR/EIS, the Supplement, this Final EIR/EIS, and the conditions in the various permits, are implemented.

Response S-19-20

1. Application of valid selection criteria was used to evaluate alternative sites. Alternative Locale I was eliminated from detailed consideration because of the lack of highway access to the majority of the site and the environmental impacts which

would be incurred to provide access. This alternative site did not present the opportunity to eliminate the significant impacts associated with landfill development at the Bolo Station site (i.e., air quality, visual), and would create additional impacts to construct the access. Moreover, none of the property is owned by Rail•Cycle. The potential for Rail•Cycle to acquire the property was not investigated as it was considered unlikely that development of the landfill at this site could reduce environmental impacts.

2. As described in the Draft EIR/EIS and Supplement, Alternative Locale G did not represent a reasonable alternative because of limited configurations for landfill design based on geologic constraints. Besides basalt flows which are mapped at the southern boundary of this locale, the Ludlow Fault, categorized as historically active, traverses the western boundary of this site. As with Alternative Locale I, based on these constraints, further investigation to determine the potential of acquiring the site was not conducted.

Response S-19-21

1. The Reduced Action Alternative was defined in consultation with the County and the BLM. The evaluation of an approximate 40 percent reduction in allowable daily tonnage and 65 percent reduction in overall capacity was determined to provide an adequate review of the potential for a decreased capacity alternative to reduce or eliminate significant impacts, while still meeting the objectives of the proposed project. Based on the anticipated shortfall in waste disposal capacity in southern California, a reduction of greater than 40 percent in the proposed daily tonnage to 12,000 tons per day would not provide the waste disposal capacity projected to be required. As noted in Chapter 2.0 of the Supplement, a waste disposal capacity shortfall of 16,000 tons per day is projected by 2005 for metropolitan Los Angeles County alone.

2. Consideration of downsizing the landfill by as much as 90 percent, as suggested in this comment, would not be meaningful, as such a definition would not meet the basic objectives of the project to provide a minimum of 50 years of landfill capacity. Moreover, evaluation of reducing the project by various increments (i.e., 10, 30, 50, percent, etc.) would not have provided meaningful data. For the majority of impacts, the reduction would result in decreasing the impacts proportionately to the reduced landfill footprint or daily tonnage.

3. The Draft EIR/EIS and Supplement concluded that under the proposed action, potential impacts to Cargill's brine wells would be mitigated to a level of less than significant. It was, therefore, not necessary to define a reduced action alternative with the specific objective of eliminating impacts to brine resources.

Response S-19-22

1. Neither NEPA or CEQA require that the lead agencies consider a decentralized project alternative. The alternatives considered in the EIR/EIS were developed in consultation with the County and BLM to provide a reasonable range of alternatives that would meet the objectives of the proposed project, while being capable of reducing or eliminating significant environmental impacts associated with the proposed landfill.

2. Development of several parcels at a number of alternate sites would not be a reasonable design alternative. It is apparent that this suggested alternative would result in spreading the impacts among several sites and inherently increase impacts due to required duplicative construction and operation requirements. Furthermore, several sites would be more difficult to regulate and monitor. It would also be counter-productive to the project's objective of providing a state-of-the-art landfill.

3. A decentralized alternative would not present the opportunity to eliminate unavoidable, adverse impacts associated with the proposed action (i.e., air quality, visual), and would potentially result in creating additional significant impacts. The disturbance at a number of locales would only increase the potential to impact additional vegetation, wildlife, cultural, and water resources, as well as create incompatible land uses.

Response S-19-23

1. The need for the proposed action is discussed in detail in Chapter 2.0 of both the Draft EIR/EIS and the Supplement. As stated in Chapter 6.0 of both the Draft EIR/EIS and the Supplement, the proposed Eagle Mountain Landfill is considered a cumulative project and not an alternative to the proposed action. The Bolo Station Landfill and the Eagle Mountain Landfill are similar private projects that are proposed to meet a portion of the long-term waste disposal requirements for southern California As discussed in Chapter 2.0 of the Supplement, the anticipated short-fall in landfill capacity projected for southern California indicates that one or more large regional landfills, such as

the proposed Bolo Station or Eagle Mountain landfills, may be required.

Response S-19-24

1. It is unlikely that development of a waste-to-energy facility at the Bolo Station site would reduce the potential to create hazardous leachates. On the contrary, toxic metals are characteristic of incinerator produced ash. If classified as hazardous, these residuals would require disposal in a designated (Class II) or hazardous waste (Class I) disposal site.

2. Waste-to-energy facilities represent a relatively new technology, and as noted in this comment, present complex environmental problems. Moreover, It is unlikely that the potential energy recovery could economically electrify trains to transport waste. Recent proposals for waste transformation facilities have been proven to be economically infeasible because of high capital costs and lower energy prices.

3. As described in Section 3.3.3 of the Supplement, because substantial evidence exists regarding the difficulty in siting waste-to-energy facilities, and because this alternate technology could not eliminate significant environmental effects of the proposed action, a waste-to-energy alternative was not evaluated in the EIR/EIS.

Response S-19-25

1 As required by CEQA, the Draft EIR/EIS and Supplement have described " a range of reasonable alternatives to the project or to the location of the project, which could feasibly attain the basic objectives of the project", and have focused "on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance". Similarly, the EIR/EIS, has met the requirements of NEPA in exploring reasonable alternatives and discussing the reasons for eliminating alternatives which were not evaluated in detail.

2. Based on the conclusions as described in the previous responses (see Responses S-19-20 through S-19-24), there is no indication that another alternative or combination of disposal methods would meet the basic objectives of the project and have the potential to reduce environmental impacts. Therefore, it is neither appropriate nor a requirement of CEQA to rewrite the Draft EIR/EIS and Supplement to further evaluate additional alternatives.

Response S-19-26

1. To enhance public understanding of how a MRF might serve the proposed action, a description of a typical MRF is provided in Section 3.2.2 of the Draft EIR/EIS. However, inclusion of this general description should not be construed to mean that construction and operation of MRFs is a part of the proposed action. To date, only the MRF in the City of Commerce has been approved. Any effort on the part of the EIR/EIS to predict where additional MRFs could be located, and to try to assess those impacts, would be speculative and misleading. CEQA and NEPA do not require speculative analysis.

2. As discussed in Response S-08-9 above, this EIR/EIS identified that up to seven MRFs may be incorporated into the Rail•Cycle system. The EIR/EIS evaluate impacts related to the transfer of solid waste by rail to the proposed landfill. Potential air quality, public health and safety, transportation and noise impacts associated with the transport of solid waste from MRFs were evaluated in the Draft EIR/EIS in Sections 5.7, 5.8, 5.12 and 5.13, respectively. Additional information regarding transportation and noise impacts along the rail-haul route was included in Sections 5.4 and 5.5 of the Supplement.

3. It is expected that the MRFs would be located in various jurisdictions throughout southern California. As separate CEQA analysis would be required to address site specific impacts from these MRFs, the CEQA lead agencies for these projects will independently review and consider the environmental impacts associated with the MRFs. It is unclear how this independent review by jurisdictions could limit the options of the decision makers for these jurisdictions as suggested by this comment.

4. As noted above, it would be speculative and misleading for this EIR/EIS to address the potential site-specific environmental impacts associated with the construction and operation of undefined Rail•Cycle MRF locations. However, typical impacts that potentially could occur at a MRF located in southern California have been addressed in recent EIRs for two specific MRFs:

   - City of Commerce MRF proposed by Rail•Cycle (David Evans and Associates, 1992).
   - West Valley MRF proposed by Kaiser/Burrtec in the City of Fontana (Chambers, 1993).

The City of Commerce MRF is a Rail•Cycle project, whereas the Kaiser/Burrtec project is not affiliated with the project.

5. Based on the EIRs for the City of Commerce and West Valley MRFs, the following typical environmental impacts may occur from the construction and operation of other MRFs in southern California (David Evans and Associates, 1992; Chambers, 1993):

   - Onsite grading to prepare for the construction of structures, parking areas and roadways. It is anticipated that most MRFs would be located in existing industrial areas along existing rail lines. Therefore, natural landforms are not expected to be disturbed.
   - Southern California is subject to seismic activity and ground shaking. MRF structures would be required to conform to seismic standards included in the Uniform Building Code.
   - The sites would be covered with impermeable surfaces (i.e., structures and paved areas) that, depending on the specific site, would result in additional storm water runoff. Liquids from materials processed through the MRF and facility washdown water would be generated. Separate onsite surface water drainage and liquid/washdown water collection systems would be required to protect surface water quality.
   - The MRFs would result in short-term (i.e., construction) and long-term (i.e., operation) air emissions in an air basin (South Coast Air Basin) that is nonattainment for certain criteria pollutants. This includes increased levels of CO at roadway intersections from vehicular idling. Air emissions could be significant on both a local and regional basis. Various mitigation measures will be required to reduce the air emission impacts to the maximum extent practicable.
   - Depending on the specific site, the additional truck traffic associated with transporting waste to the MRF could impact local traffic and circulations. Roadway and intersection improvements to maintain an acceptable level of service (LOS) may be required.
   - As it is expected that the majority of MRFs would be constructed in existing industrial areas near existing rail lines, land use impacts are not anticipated. Typical land use issues that would need to be addressed include, but are not limited to, zoning and General Plan land use designations, surrounding land uses, noise, odor, lighting, aesthetics, and public utilities and services. Local jurisdictions would be responsible for assuring that land use issues are adequately addressed and that appropriate conditions of approval are established for each MRF.

   As noted above, the site-specific impacts for each MRF will be addressed in EIRs prepared by the local jurisdiction.

Response S-19-27

1. An analysis of the potential impacts at rail/highway grade crossings associated with the increased rail traffic was included in Sections 4.12 and 5.12 of the Draft EIR/EIS and in Appendix I, where Table I.2 provided the hazard index for Existing Conditions and Tables I.3 and I.4 provided the hazard index for operation of the landfill at an initial rate of 3,000 tons per day and at full operation at 21,000 tons per day. In response to other comments on the Draft EIR/EIS, the analysis of grade crossings was expanded to include Los Angeles, Orange, Riverside and Kern counties, in addition to San Bernardino County. The results of this expanded analysis were included in Appendix F of the Supplement.

2. Sections 5.8.1.2 and 5.8.1.3 of the Draft EIR/EIS address railroad safety operations and spill prevention and waste management, respectively. The containers used to transport solid waste from the MRFs to the proposed landfill would be constructed to assure that liquids do not escape. While the containers would be leak proof for liquids, they would not be air-tight, and would be capable of compensating for fluctuations in air volume caused by partial decomposition of solid waste, and changes in temperature and pressure along the rail line between Los Angeles and Bolo Station. Therefore, pressure would not build up within the containers creating a potential safety or fire hazard.

Response S-19-28

1. The potential hazards associated with subsurface fires and landfill gas migration are described in Sections 5.8.1.1.2 and 5.8.1.1.3 of the Draft EIR/EIS. As noted in these sections, due to the design features required for new landfills, such as at Bolo Station, subsurface fires have become rare or nonexistent at new landfills. The design and monitoring features which would be incorporated at the proposed landfill to prevent and control any such fires are outlined in Section 5.8.1.1.2 of the Draft EIR/EIS. Features to assure that landfill gas

does not present an explosion hazard are described in Section 5.8.1.1.3 of the Draft EIR/EIS.

Response S-19-29

1. Hydrologic and hydraulic analyses to identify required drainage improvements were based on the San Bernardino County Hydrology Manual and 100-year peak flow levels (Rust, 1994). This is in accordance with the state standards in Title 23, CCR, Chapter 15, Article 4, which require that Class III landfills be designed using the 100-year, 24-hour storm event.

2. The analysis as described in the Draft EIR/EIS was refined and updated in response to comments from the County's Transportation/Flood Control Department, Water Resources Division. The parameters of the refined analysis were determined in consultation with the County to provide a conservative analysis of the potential watershed runoff to Bristol Dry Lake.

MORRIS A. BALDERMAN/CONSULTING GEOLOGIST
P.O. BOX 796 - DANA POINT, CA 92629 714/240-2396 - FAX 714/240-8425

February 17, 1994

County of San Bernardino
Planning Department
385 North Arrowhead Avenue
San Bernardino, CA 92415
Attn.: Mr. Randy Scott

Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, CA 92507
Attn.: Mr. Doug Romoli

Technical Review
Draft EIR/EIS Supplement
Proposed Rail•Cycle Bolo Station Landfill
San Bernardino County, California

Gentlemen:

The attached report summarizes my review of the Draft EIR/EIS Supplement and related documents. Information for this review also was obtained from independent reference to published maps and reports, examination of aerial photographs, and reconnaissance of the site area. This review was performed for Cargill Salt Company.

The Draft EIR/EIS Supplement was found to be incomplete and inaccurate in a number of areas. Many of the deficiencies noted in this review relate to potential impacts on the adjacent Cargill brine wells.

Data from Rail•Cycle's site investigations indicate that leaks from the landfill would contaminate the brine wells. There also are concerns that construction and development of the proposed large landfill could affect the brine wells, even if it does not leak. Adverse impacts on the brine wells probably cannot be avoided if the landfill is constructed as proposed.

Sincerely,

Morris A. Balderman
Certified Engineering Geologist EG 940

TECHNICAL REVIEW
DRAFT EIR/EIS SUPPLEMENT
PROPOSED RAIL•CYCLE BOLO STATION LANDFILL
SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for

Cargill Salt Company
7220 Central Avenue
Newark, CA 94560-4206

Morris A. Balderman
Consulting Geologist
P.O. Box 796
Dana Point, CA 92629

February 1994

TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 SITE SELECTION 3
  2.1 Alternative Locale L 3
  2.2 Alternative Locale G 4
3.0 AFFECTED ENVIRONMENT 5
  3.1 Soils and Stratigraphy 5
  3.2 Faults 6
    3.2.1 Literature References 7
    3.2.2 Geophysical Surveys 8
    3.2.3 Aerial Photograph and Geomorphic Interpretations 13
    3.2.4 Trenching 14
  3.3 Ground Fissures 15
  3.4 Lineament A 16
  3.5 Buried Channels 18
  3.6 Soil Consolidation 19
  3.7 Ground Water 20
  3.8 Mineral Resources 21
    3.8.1 On-Site Mineral Resources 22
    3.8.2 Conditions Affecting Brine Production 23
4.0 IMPACT EVALUATIONS 25
  4.1 Impacts from Faults 25
  4.2 Impacts from Ground Fissures 25
  4.3 Impacts from Buried Channels 26
  4.4 Impacts from Soil Consolidation 26
  4.5 Impacts on Ground Water 28
    4.5.1 Potential Contaminant Migration 28
    4.5.2 Unsaturated Zone Monitoring System 30
    4.5.3 Ground Water Monitoring System 30
    4.5.4 Impacts from Ground-Water Contamination 32
  4.6 Impacts on Mineral Resources 33
5.0 SUMMARY OF CONCLUSIONS 34
REFERENCES 36

TABLE

1 Summary of Deficiencies in Draft EIR/EIS Supplement

FIGURES

1 Locations of Brine Wells and Proposed Landfill
2 Potential for Landfill to Contaminate Brine Wells
3 Rail•Cycle Landfill Siting Alternative Locale I
4 Locations of Geophysical Lines, Trenches, Fissures, and Lineaments
5 Seismic Reflection Record With Rail•Cycle Interpretation
6 Comparison of Seismic and Gravity Profiles
7 Profile Locations
8 Profile A-A'
9 Profile B-B'

EXECUTIVE SUMMARY

This report summarizes comments from technical review of the Draft EIR/EIS Supplement (the "Supplement") and related technical documents. Preliminary information also was obtained from the recent exploration and testing performed for Rail•Cycle by P.E. LaMoreaux & Associates. Information for this review also was obtained from independent review of published maps and reports, examination of aerial photographs, and field reconnaissance of the site area.

The objective of this review is to evaluate completeness and accuracy of the Draft EIR/EIS Supplement with regard to geology, soils, and related topics. This review particularly addresses aspects of the proposed landfill that could impact the existing brine wells at the adjacent Cargill Amboy Solarchem facility.

The proposed landfill would greatly impact the brine wells. The landfill is proposed to be located within a few hundred yards of the existing Cargill brine wells. Ground water under a large part of the proposed landfill site flows toward the brine wells and the Draft EIR/EIS acknowledged that leaks from the landfill could contaminate the brine wells. In addition to the potential for contamination, there are concerns that construction and development of the proposed mega-landfill could affect the brine wells even if it does not leak.

This review of the Supplement found it to be incomplete and/or inaccurate in a number of important areas. Many of these deficiencies are related to potential impacts on the Cargill brine wells.

Alternatives to the proposed site were not considered completely. Two potentially suitable "locales" were improperly eliminated on the basis of incorrect or inaccurate information on land use and geology.

The descriptions of the affected environment were found to be incomplete and inaccurate. The description of subsurface soils and ground-water conditions are incomplete and do not include recent information that conflicts with the interpretations presented. The investigation of faults at the site is incomplete and presents conflicting interpretations. Ground fissures were recognized at the site but have not been investigated. A prominent lineament that projects toward the site was identified by Rail•Cycle's consultants as possible evidence of active faulting or fissuring but was not investigated completely. The descriptions of mineral resources at the site are based on incomplete exploration and theories that have been proven incorrect by recent exploration and testing performed for Rail•Cycle.

The evaluations of potential impacts from the proposed landfill are largely based on incomplete and/or inaccurate descriptions of the affected environment, and are therefore unreliable. The evaluations of potential for leaks from the landfill to contaminate the underlying ground water and brine are a particular concern with regard to the brine wells. These evaluations are based on incomplete and incorrect descriptions of the hydrogeologic conditions at the site. The Supplement assumes that the proposed monitoring of the unsaturated zone and the ground water will detect releases before ground water is contaminated. However, the proposed unsaturated zone monitoring system is unproved and appears unlikely to work as planned. The proposed ground water monitoring system is based on inadequate site characterization and does not comply with the applicable EPA and State standards. Deficiencies in the proposed monitoring systems have been noted in reviews by the EPA and the State.

Construction of the landfill as planned almost certainly will cause adverse impacts on the Cargill brine wells. An evaluation of the proposed design for the Bolo Station landfill concluded that the liner system will not prevent leachate, VOC vapors, or biogenic gasses from leaking into the environment. Leaks from the landfill would contaminate the brine wells and prevent further use. Corrective actions that could be used to control or treat contamination in the ground water also would affect brine production. As a result, adverse impacts on the brine wells probably cannot be avoided if the landfill is constructed as proposed.

Specific deficiencies that were identified from review of the Supplement include the following:

1. Alternative Locale I was improperly eliminated in the site-selection process, due to incorrect land-use information.

2. Alternative Locale G was improperly eliminated from the site-selection process due to inaccurate geologic information.

3. Descriptions of soils and stratigraphy in the Supplement do not include recent Rail•Cycle data that conflict with the interpretations presented.

4. The investigations of faults at the site are incomplete and inadequate to demonstrate that no active faults are present at the proposed landfill; geologists with the State Water Resources Control Board have recognized this deficiency and recommended additional detailed exploration.

5. There have been no investigations of ground fissures that represent a potential hazard to the proposed landfill.

6. Lineament A, a prominent geologic feature projecting toward the site, has not been investigated completely in accordance with recommendations from Rail•Cycle's consultants.

7. The investigation of buried channels found evidence of possible sand-filled channels that could be preferential flow paths but these were not investigated further.

8. Additional discussions of soil consolidation are presented in the Supplement but the technical basis for these discussions is uncertain; the evaluations of soil consolidation do not appear to have adequately considered the very low-density soils under the part of the site near the brine wells.

9. The additional descriptions of ground-water conditions in the Supplement do not include data from recent exploration and testing (by consultants to Rail•Cycle) that conflict with the interpretations presented.

10. The additional descriptions of on-site mineral resources in the Supplement are based on theories that have been proved incorrect in recent tests by consultants to Rail•Cycle.

11. The descriptions of conditions affecting brine production at the Cargill wells are based on incorrect assumptions and incomplete information.

12. Potential impacts to the proposed landfill from possible active faults cannot be evaluated because the investigations of faulting are incomplete.

13. Potential impacts to the proposed landfill from existing and possible future ground fissures have not been evaluated.

14. The evaluation of potential impacts from buried channels is incomplete; possible sand-filled channels have not been addressed.

15. The evaluation of potential impacts from soil consolidation under the landfill are based on analyses that do not appear to have adequately considered conditions in the part of the site near the brine wells.

16. The evaluation of potential impacts from differential soil consolidation are inconsistent with data from Rail•Cycle's drilling programs.

17 The evaluations of potential for contaminants to migrate through the ground water are based on incorrect and inaccurate descriptions of ground-water conditions at the site.

18. The evaluations of potential for the landfill to contaminate the ground water assume that releases would be detected by the unsaturated zone monitoring system; the proposed system uses an unproved approach and there is no assurance that it will be effective.

19. The evaluations of potential for the landfill to contaminate the ground water assume that releases would be detected by the proposed ground-water monitoring system; this system was designed from incomplete site characterization and does not comply with applicable State and EPA standards (as noted in reviews by the State and the EPA).

20. Undetected leaks from the landfill would contaminate the adjacent Cargill brine wells.

21. If leaks from the landfill are detected, the corrective actions that could be implemented would impact production from the brine wells.

22. The evaluation of potential impacts on brine production is based on inaccurate descriptions of conditions at the brine wells and incomplete information on brine flow.

TECHNICAL REVIEW
DRAFT EIR/EIS SUPPLEMENT
PROPOSED RAIL•CYCLE BOLO STATION LANDFILL
SAN BERNARDINO COUNTY, CALIFORNIA

1.0 INTRODUCTION

This report summarizes comments from technical review of the Draft EIR/EIS Supplement (the "Supplement") and the supporting documents that describe investigations of the Bolo Station site subsequent to the original Draft EIR/EIS. Preliminary information also was obtained from the recent exploration and testing performed for Rail•Cycle by P.E. LaMoreaux & Associates. This work was described in a field briefing attended with BLM staff on January 10, 1994 and from other brief discussions with LaMoreaux personnel. Further information for this review was obtained from independent review of published maps and reports, examination of aerial photographs, and field reconnaissance of the site area.

The objective of this review is to evaluate completeness and accuracy of the Draft EIR/EIS Supplement with regard to geology, soils, and related topics. This review particularly addresses aspects of the proposed landfill that could impact the existing brine wells at the adjacent Cargill Amboy Solarchem facility.

The proposed landfill would greatly impact the brine wells. The landfill is proposed to be located within a few hundred yards of the existing Cargill brine wells, as shown on Figure 1. The Rail•Cycle site investigations reported that ground water under a large part of the proposed landfill site flows toward the brine wells (see, for example, Supplement Figure 4.2.1) and the Draft EIR/EIS acknowledged that leaks from the landfill could contaminate the brine wells. Ground water that would be contaminated by leaks from the landfill would flow to the brine wells and be extracted at the wells, as shown on the diagrammatic cross section in Figure 2. In addition to the potential for contamination, there are concerns that construction and development of the proposed mega-landfill could affect the brine wells even if it does not leak.

Contamination of the local aquifer and the brine wells by the proposed landfill would be a very serious environmental impact. Proper evaluation of this potential impact requires thorough review of the project characteristics and site conditions relating to integrity of the landfill and effectiveness of the proposed monitoring systems. These issues must be addressed at the EIR/EIS phase because of their importance for evaluating the potential impacts on the brine wells.

The organization of this report generally follows the order of topics presented in the Draft EIR/EIS Supplement. This report reviews the alternatives to the proposed action, the description of the affected environment, and the evaluations of impacts.

Alternatives to the proposed action have not been evaluated completely, as described in the review of the site selection process in Section 2.0. Review of the Supplement found that Alternative Locales I and G were excluded improperly, based on inaccurate location of a nearby Wilderness Study Area and inaccurate geologic information. The Draft EIR/EIS Supplement is inaccurate and incomplete in this regard and further evaluation of the alternative site locations are needed.

Section 3.0 reviews the additional descriptions of the affected environment contained in the Draft EIR/EIS Supplement and the supporting technical reports. Descriptions of the affected environment in the Supplement were found to be incomplete and inaccurate. Topics that have not been investigated completely include: subsurface geology, faults, ground fissures, foundation soils, ground water, and mineral resources. The fault investigations did not complete the additional work recommended by Rail•Cycle's consultants in the technical reports for the original Draft EIR/EIS. The descriptions of foundation soils, ground water, and mineral resources do not accurately present the results of the subsequent site investigations performed by consultants to Rail•Cycle.

The impact assessments in the Draft EIR/EIS Supplement are reviewed in Section 4.0. Many of these assessments are based on the incomplete and/or inaccurate descriptions of the affected environment, and are similarly invalid. Potential impacts from the proposed landfill, particularly regarding the brine wells, need to be re-evaluated after site conditions are completely and accurately characterized.

Conclusions from this review are discussed in Section 5.0 and are summarized in Table 1.

2.0 SITE SELECTION

Section 3.3 of the Draft EIR/EIS Supplement provides a "clarification" of how alternatives to the proposed landfill were evaluated. A revised description of the site selection process is contained in Section 3.3.2. This revision is difficult to understand. The Bolo Station site was selected before preparation of the October 1990 Jacobs Phase I report (Ref. 1), and an evaluation of alternative sites was described in a December 1990 Jacobs report (Ref. 2). The reasons for the site-selection decisions that were made in 1990 certainly could not have changed two to three years later, between preparation of the Draft EIR/EIS in late 1992 and preparation of this supplement in late 1993.

The Draft EIR/EIS (Section 3.7.2.2) described evaluation of four "Alternative Locales" along the railroad between Barstow and Amboy. According to the Draft EIR/EIS, these alternatives were not considered further because ATSF does not own land within them. As noted in previous reviews of the Draft EIR/EIS (for example, Ref. 3), a proper evaluation of alternatives would require considering all the potentially suitable sites, including land owned by other parties.

The Draft EIR/EIS Supplement presents different reasons for rejecting the four Alternative Locales. The reasons given for rejecting Alternative Locales I and G were inaccurate or incorrect, as discussed below. Because these locales were excluded improperly, the evaluation of alternatives is not complete.

2.1 Alternative Locale I

Table 3.3 of the Draft EIR/EIS Supplement recommends that Alternative Locale I be eliminated due to land use conflict, stating that it is largely within California Desert Protection Act wilderness area No. 251. This statement was checked and found to be incorrect.

Location of Alternative Locale I is shown on Figure 3, along with the locations of the nearby Wilderness Study Areas, taken from current BLM maps (Ref. 4 and 5). This map shows that Alternative Locale I is not largely within the Cady Mountains Wilderness Study Area (CDCA-251), as stated in the Draft EIR/EIS Supplement. Instead, Alternative Locale I is seen to be entirely outside any Wilderness Study Areas shown on the current BLM maps. Figure 3 also shows that Alternative Locale I is substantially larger than the proposed Bolo Station landfill, and apparently would allow development of a comparable facility. ①

Alternative Locale I has several advantages as compared to the proposed Bolo Station site. Development of a landfill at this alternative site would avoid conflict with the Cargill facility and with the mineral resources at Bristol Lake. This alternative also would avoid the adverse site conditions associated with the Bristol Lake playa, including soft soils, high ground water, and ground fissures. Moreover, Alternative Locale I offers a substantial reduction in haul distance, as round-trip mileage from the Los Angeles area would be about 100 miles less than the mileage to Bolo Station. Detailed evaluation of this alternative is needed. ① CONT.

2.2 Alternative Locale G

The original Draft EIR/EIS (Section 3.7.2.2) described Alternative Locale G as having sufficient acreage for a Rail•Cycle landfill, although offering limited configurations. The original Draft EIR/EIS claimed this alternative site was eliminated because ATSF does not own the land and because of the limited configurations for development.

The Supplement (Section 3.3.2.2) excluded Alternative Locale G from the "Third-Tier Site Evaluation", claiming that lava beds south of Interstate 40 constrain potential development. However, reference to the geologic map of this area (Ref. 6) found this to be inaccurate. ②

As shown on Figure 3.19 of the original Draft EIR/EIS, Alternative Locale G occupies about four square miles on the south side of the railroad and National Trails Highway, just east of Ludlow. The U.S. Geological Survey geologic map of this area (Ref. 6) shows that the area of Alternative Locale G (as shown in the Draft EIR/EIS) is underlain by alluvium. The lava beds and other volcanic rocks are mapped outside the alternative locale.

Alternative Locale G has several advantages as compared to the proposed Bolo Station site. As discussed above for Alternative Locale I, this site also would avoid conflicts with the Cargill facility and the mineral resources at Bristol Lake, and would avoid the adverse site conditions at the playa. Alternative Locale G also is much closer to the Los Angeles area; round-trip haul distances would be about 60 miles less than to Bolo Station. Detailed evaluation of this alternative also is needed.

3.0 AFFECTED ENVIRONMENT

Section 4.0 of the Draft EIR/EIS Supplement contains results from some of the additional site investigations performed for the Rail•Cycle program subsequent to the original Draft EIR/EIS. Review of the related technical reports indicates that important site investigations are not complete and that the Supplement ignores important data. These deficiencies are described in the following sections.

3.1 Soils and Stratigraphy

Section 4.1.1 of the Draft EIR/EIS Supplement includes a summary of stratigraphic interpretations from a single 500-foot boring (BLM-1, Figure 1) drilled for Rail•Cycle near the southwest corner of Section 16, about a mile east of the Cargill brine wells (Ref. 7). However, the Supplement does not include important additional information developed by consultants to Rail•Cycle, some of which contradicts the interpretations in the Supplement.

In December 1993, P.E. LaMoreaux & Associates (consultants to Rail•Cycle) drilled two 350-foot holes near the southwest corner of Section 17, just north of the Cargill brine wells (HAL-1 and HAL-2, Figure 1). From preliminary information obtained in the January 10, 1994 field briefing with BLM staff, we understand that the HAL-1 hole was cored continuously; being the first attempt to obtain continuous core from a boring at the Bolo Station site. We also understand that P.E. LaMoreaux staff have been performing intensive studies to evaluate the geologic relationships between their new borings and the previous drilling at the site. These studies would be particularly important for understanding effects at the adjacent Cargill brine wells, and need to be included in the Draft EIR/EIS. ③

Preliminary information from the LaMoreaux work contradicts the descriptions in Section 4.1.1 of the Draft EIR/EIS Supplement. The Supplement states that there is a single water bearing zone to 290 feet depth. In contrast, the LaMoreaux work found that ground water from 210 to 350 feet depth is separate from the uppermost ground water, having lower piezometric levels and greatly different chemistry. The Supplement also states that moisture content in the beds from 275 to 390 feet depth was low and that only one five-foot water bearing sand bed was encountered. However, LaMoreaux completed a well in the 210 to 350 foot interval and reportedly was able to produce 50 gallons per minute (gpm) in a 72-hour pumping test, showing that the beds are saturated and produce substantial volumes of brine or water.

The Draft EIR/EIS Supplement clearly is incomplete without results from the LaMoreaux work. Although the LaMoreaux work may not be sufficient to reliably evaluate impacts on the Cargill brine wells, the Supplement should be corrected to include the LaMoreaux data. ③ CONT.

3.2 Faults

Section 4.1.2 of the Draft EIR/EIS Supplement contains information from additional fault investigations performed for Rail•Cycle. This included geologic mapping that was not available for this review, geophysical surveys (Ref. 8), and a minimal field program accompanied by review of published reports (Ref. 9). Review of the available background technical reports determined that they were not adequate to conclude that no potentially active faults are present at the proposed landfill site. Specific concerns with the Rail•Cycle technical reports on faulting are discussed in the following subsections.

Geologists from the State Water Resources Control Board (SWRCB) also reviewed the Rail•Cycle faulting investigations and concluded that they are inadequate to demonstrate absence of faults in the landfill area. Because of the remaining uncertainties, the SWRCB recommended requiring that all excavations for new or expanded waste disposal must be logged under direction of a Certified Engineering Geologist to determine whether faults or other geologic hazards are present. No waste is to be disposed within these areas until the report of this logging has been approved by the Regional Water Quality Control Board (Ref. 10). The SWRCB also noted that previously unknown Holocene faults may be found during construction and requested Rail•Cycle to describe how such faults will affect design and construction of the proposed landfill (Ref. 11). ④

The additional inspections and submittals requested by the SWRCB might satisfy SWRCB staff concerns that the proposed landfill complies with regulations regarding fault setbacks. However, for purposes of the EIR/EIS process it is notable that the site has not been investigated adequately to assure that the project can be completed as planned. Moreover, the presence of undiscovered faults or fissures could cause greater than expected potential for ground-water contamination from the proposed landfill. This is a particular concern for the Cargill brine wells, which would be contaminated by leaks from the landfill.

Rail•Cycle is aware that complete preliminary site investigations are needed for proper evaluation of potential environmental impacts. The Rail•Cycle comments on the Draft EIR for the proposed Cadiz Valley Agricultural Development (Ref. 12) stated: ⑤

> "The concept of preparing geotechnical reports as the project progresses is inappropriate. Geotechnical work should be done now, not after the fact, so the environmental effects can be evaluated."

Rail•Cycle certainly should investigate their proposed landfill with the same diligence they expect for the proposed agricultural development.

⑤ CONT.

3.2.1 Literature References

Section 4.1.2.1 of the Draft EIR/EIS Supplement discusses potential for active faulting in the site area, chiefly based on published geologic reports compiled by Jacobs Engineering (Ref. 9). Information in this section and in the Jacobs report was checked and found to be inaccurate.

The Draft EIR/EIS Supplement describes the Bolo Station site as being in the tectonically stable eastern part of the Mojave Desert. However, the Amboy area is not typical of the stable eastern Mojave. Notably, the 6000-year old Amboy crater is evidence of geologically young tectonic activity only a few miles away. Some geologists describe the Bristol Lake area as the eastern part of the tectonically active western Mojave Desert or as a zone of young faulting between the western and eastern blocks (Ref. 13 and 14). One authoritative summary of faulting in California (Ref. 15) estimated that the Bristol Mountain fault could produce a Magnitude 7.0 earthquake, indicating potential for significant activity on a fault projecting toward the site. The published geologic reports on the site area indicate potential for active faulting, and a corresponding need for thorough site investigations.

⑥

The Jacobs faulting study (Ref. 9), which is the background technical report for this part of the Supplement, incorrectly cites two reports by the California Division of Mines and Geology (CDMG) as indicating absence of potentially active faults in the site area. Jacobs cites the CDMG summary of 1986-1987 fault evaluations in the Mojave Desert (Ref. 16), as providing information regarding faults at the site. However, the cited report actually covers the area generally southwest of the Bullion Mountains, about 25 miles southwest of this site. The CDMG report (page 8 of Ref. 16) states that faults in more remote areas were not evaluated even though they may be active. The Ludlow fault (about 15 miles southwest of Bolo Station) is mentioned specifically in this regard. It is clear that the work reported in the cited CDMG report does not include the project area, and does not establish whether or not faults in the area are active.

⑦

The 1992 Preliminary Fault Activity Map of California (Ref. 17) also was cited as showing no active faults near the Bolo Station site. While this is the most recent State fault map, it does not contain specific information regarding faults in the project area. Instead, the map explanation and the accompanying appendices indicate that faults in this area were reproduced from the previous 1975 State fault map. In the project area, the 1975 map was based on much earlier regional investigations that did not specifically address fault activity.

⑦ CONT.

3.2.2 Geophysical Surveys

The investigations of faulting at the Bolo Station site mainly relied on the geophysical surveys performed for Jacobs Engineering (Ref. 8), and the geophysical surveys were the only field methods used in much of the area. However, use of geophysical methods alone does not adequately assure that faults will be recognized. The CDMG guidelines for evaluating the hazard of surface fault rupture (Appendix C in Ref. 18) state: "Geophysical methods alone *never* (italics in original) prove the absence of a fault nor do they identify the recency of activity." Geophysical methods are limited in this regard because the results are interpretative, rather than direct evidence, and because their resolution is limited, such that small fault displacements may not be recognized.

The geophysical surveys were run along three line segments, shown on Figure 4. The layout of these survey lines is unusual. Seismic lines and other such geophysical surveys designed to evaluate subsurface geology typically are run along a number of parallel lines that are connected by one or more crossing lines. In this manner, geologic structures or other features can be correlated between the parallel lines and their trends can be recognized. The survey lines typically are laid out perpendicular to the general trend of the known structures in an area. The "Y" pattern used in this survey provided no potential for correlating features between lines. The seismic surveys also were not well oriented for evaluating the generally northwest-trending geologic structure in the project area. The largest part of the seismic line is at about 45 degrees to the regional structure. The eastern part of the seismic line is nearly parallel to structure, which is a particularly poor orientation for investigating faults.

The geophysical techniques used are summarized in Table 4.1.1 of the Supplement. Reviews of these techniques and the survey results are summarized in the following paragraphs.

⑧

Ground Penetrating Radar (GPR): The GPR survey was intended to detect near-surface, Holocene faulting. GPR surveys involve transmitting high-frequency electromagnetic energy into the ground and measuring the time delays for return of the reflected signals. This method is similar to a seismic reflection survey (discussed below) conducted on a very small scale, and the GPR records are similar in appearance to seismic reflection records. Theoretically, GPR could detect near-surface faults in some environments, but this method is not generally used for fault investigations in the southern California desert. As a result, it is very difficult to be confident in reliability of the GPR method.

⑨ The GPR report (Appendix A of Ref. 8) estimated an effective penetration depth of six to eight feet, but does not indicate that this was confirmed reliably. There was no estimate of the minimum offset that could be recognized from this survey. The GPR records show some patterns that could indicate geologic features but the report does not describe correlations of the GPR record with specific features observed in the field. (Due to the shallow penetration of the GPR, it would have been very easy to excavate and log a number of test pits or trenches along the line and correlate their logs with the survey data.) The report noted that there were a large number of animal burrows and other voids as much as two feet deep along the GPR line and speculated that some of the record anomalies may have been caused by these voids. However, they did not note locations of the voids in their report and did not indicate which anomalies are thought to represent these features. The GPR report also stated that some of the anomalies may be related to depositional or erosional features, subsidence related to pumping of the brine wells, or variations in conductivity of the near-surface soils. Again, they did not say which anomalies were related to each of these phenomena. Four of the GPR anomalies were recommended for further evaluation but the report does not explain how these differ from the others and the differences are not apparent from the survey record. Overall, it is difficult to place much reliance on the GPR survey.

⑩ Electromagnetic and Resistivity Surveys: The electromagnetic and resistivity surveys were run to detect both faults and buried channels. These methods measure electrical conductivity (or resistivity, the reciprocal of conductivity) of a volume of earth materials. The volume measured increases as the depth of penetration increases, and the resolution of the method is reduced accordingly. These methods potentially could detect faults, where the faults are associated with contrasts or anomalies in electrical conductivity. Contrasts in conductivity occur where a fault juxtaposes markedly different materials, such as sediments

and crystalline rock or sand and clay. In some cases the fault zone itself can have anomalous electrical conductivity, such as where a fault is marked by clay gouge or where it has higher water content than the surrounding earth. The electromagnetic and resistivity methods are not well suited to detect faults within a thick sequence of generally similar sediments, such as is present at this site. Similarly, these methods could detect buried channels where the channel fill has electrical conductivity that is different from the surrounding materials. At the depths to water in this area there may not be sufficient contrast to detect channels marked by more subtle changes in sediment classifications, such as silty sand compared to sandy silt. However, these more subtle differences in soil type can represent preferential flow paths for ground water. ⑩ CONT.

Three major anomalies were indicated by the electromagnetic and resistivity surveys and interpreted to represent buried channels at shallow depth. Anomaly D2, located about 2200 feet east of well MW-7, also was reported to be associated with a substantial change in electromagnetic response and a contrast in the surface soils (Ref. 8, page 23). Changes of this type could indicate surface faulting but Rail•Cycle did not report an investigation of faulting in the area of Anomaly D2.

⑪ Seismic Refraction: Seismic refraction surveys measure the velocity of sound in the various subsurface layers and can be useful for determining parameters such as depth to bedrock. The seismic refraction survey performed for Rail•Cycle extended to a maximum depth of about 300 feet and detected only one marked change in seismic velocity, coinciding with the water table. Jacobs (Ref. 8) noted that the water table determined from the seismic refraction survey appeared as a smooth line along the survey and made numerous references to this finding as demonstrating that no faults are present; a statement repeated in the Draft EIR/EIS Supplement. This interpretation is not sound geology. Although faults can form ground-water barriers under some conditions, the absence of ground-water barriers does not prove that faults are not present.

⑫ Seismic Reflection: Seismic reflection surveys provide a sonic simulation of geologic structures and are used widely to investigate subsurface geology. These surveys involve generating seismic energy at the ground surface and measuring the time delays for the reflected sound waves to return at a number of points. After extensive computer processing, results of these surveys are presented as a seismic profile or cross section along the line of survey. Alternating light and dark bands on these records are called reflectors and represent contrasts in acoustic properties of the subsurface materials. The reflectors typically correspond to bedding or other low-angle discontinuities. This method generally cannot show steeply dipping features directly. The seismic reflection record shows time delays; approximate depths to the reflectors are estimated from velocity data and correlations with borings or other data that may be available.

The seismic reflection record was examined to check validity of the interpretations and the conclusions presented in the Jacobs report (Ref. 8) and repeated in the Draft EIR/EIS Supplement. Figure 5 shows two copies of the seismic reflection record (reproduced from Plate 3 of Ref. 8). The upper record was copied without Jacobs' interpretation and the lower record shows the "top of bedrock" reflector interpreted by Jacobs.

⑫ CONT.

Several segments of the seismic reflection record in Figure 5 can be seen to have data of very poor quality such that correlations are virtually impossible. These appear to represent extraneous noise or interferences, such as data from outside the plane of the section, surface noise, diffractions from steeply dipping discontinuities or point sources, or problems in data collection or processing. Features that can cause these types of problems on seismic records include faults and buried channels. Segments of very poor quality data occur in several areas, notably between Stations 180 and 217 (a short distance east of the Cargill brine wells) and the deeper section between Stations 510 and 600. The record from Station 450 to 510 also is very disturbed but some continuous reflectors can be seen.

Jacobs (Ref. 8) noted a strong reflector that they interpreted to be the top of bedrock and claimed that the "remarkable continuity" of this horizon clearly indicates the absence of faulting, a claim repeated in Section 4.1.2.3.2 of the Draft EIR/EIS Supplement. Examination of the seismic record and comparison with the Jacobs interpretation (Figure 5) indicate that these claims are inaccurate.

The horizon interpreted by Jacobs as the top of bedrock appears in the eastern part of the record as a set of strong reflectors below the 250 ms (milliseconds) time line, corresponding to a depth of about 600 feet. This horizon dips to the northwest, and just beyond Station 610 it is near the bottom of the record section, at about 900 feet depth. For at least 2000 feet westward from Station 610, the record is of very poor quality such that no correlations can be made. Jacobs shows the top of bedrock reflector flattening at this point and continues it below the bottom of the section (i.e., below their deepest data). Examination of the photocopied record section (Figure 5) shows no basis for this line and indicates that the top of bedrock dips below the

⑫ CONT.

bottom of the section. Continuing west from about Station 510, a set of generally flat-lying reflectors are seen at the bottom of the section. Jacobs interpreted the deepest reflectors as the top of bedrock, although there is no basis for correlating them with the top-of-bedrock reflector seen east of Station 610. These reflectors can be followed westward to about Station 217, although they show a number of irregularities that may be faults or may be interferences in the data. From about Station 217 to about Station 180, just east of the Cargill brine wells, the record is again disturbed so that continuity of the reflectors is uncertain. Instead of having "remarkable continuity", the top-of-bedrock reflector correlated by Jacobs is seen to have questionable continuity over a large part of the survey, and the horizon mapped at the west part of the section is not continuous with the horizon mapped at the east.

⑬

The top of bedrock interpreted from the seismic reflection survey was substantially different from the bedrock profile determined from a previous gravity survey performed for Rail•Cycle (Ref. 19 and Section 3.6 of Ref. 20). The gravity survey showed the top of bedrock sloping westward under the western part of the site. A particularly steep northwest-trending escarpment with more than 1000 feet of relief was seen just west of the proposed landfill and was interpreted as a "possible" or "probable" fault (Figures 3-12 and 4-6 in Ref. 20). A northwest-trending subsurface fault in this area would be along the southeast projection of the Bristol Mountain fault (Figure 4-3 in Ref. 20) and along the northwest projection of faults mapped in the Calumet Mountains area by the U.S. Geological Survey (Ref. 21). The probable presence of such a large buried fault adjacent to the proposed landfill is important for evaluating site suitability.

The Draft EIR/EIS Supplement (Section 4.1.2.3.2) notes the substantial difference between the seismic and gravity surveys and attributes this discrepancy to the greater accuracy of the seismic method. Comparison of the bedrock profiles determined from the seismic and gravity surveys does not support this interpretation. Figure 6 shows the depth to the top-of-bedrock reflector interpreted by Jacobs (taken from Plate 3 of Ref. 8) compared with the depth to bedrock interpreted from their gravity survey (taken from Figure 3-12 of Ref. 20). East of about Station 600, the two profiles are within a few hundred feet of each other and the difference between them might be explained by the different accuracy of the two exploration methods. West of about Station 500, however, the two profiles diverge greatly. The bedrock profile indicated by the gravity survey slopes westward to more than 2000 feet depth, while the seismic interpretation assumed the top of bedrock was at about 1000 feet, or just at the bottom of the interval surveyed. This discrepancy cannot be attributed to the different accuracies of the two

S-20

techniques; the seismic survey only penetrated to about 1000 feet depth and could not detect the deeper bedrock profile.

⑬ CONT.

It is notable that the two profiles diverge between Station 500 and Station 600. As discussed above, the top-of-bedrock reflector interpreted in the eastern part of the line dips below the bottom of the record section near Station 610. Jacobs interpreted this horizon to flatten out and continue just below the maximum depth of their data, and connected it with the lowest reflectors detected west of Station 510. Comparison with the gravity survey shows that the western "top-of-bedrock" reflector is most probably a sedimentary horizon within the basin fill and does not correlate with the eastern "top-of-bedrock" reflector. As a result, the seismic reflection survey does not rule out presence of large fault displacements under the site, particularly in the areas of disturbed records. These include the segments extending at least 2000 feet westward from Station 610 and at least 600 feet west of Station 217, near the Cargill brine wells.

3.2.3 Aerial Photograph and Geomorphic Interpretations

Interpretations of aerial photographs and geomorphic relationships were used in the faulting investigations and are referenced in Section 4.1.2.3.4 of the Supplement. This work was performed by Dr. Thomas Rockwell, a consultant to Jacobs, and was described in an appendix to their geophysical field exploration report (Appendix C of Ref. 9). The report does not include maps of the area covered, lineament maps, copies of interpreted aerial photographs, or other documentation typical of such studies. Results of this aerial photograph analysis conflict with the interpretations presented previously in the Jacobs Phase II report (Ref. 20).

⑭

Rockwell reports that no faults or lineaments were seen in the region around Amboy, except Lineament A. In contrast, the previous interpretations by Jacobs consultants MESA^2 and MAA (Plate 4-1 in Ref. 20) showed a large number of features described as lineaments, fissures, and open fissures. Fissure are clearly evident on the ground surface a short distance south of the Cargill brine wells. A number of lineaments in addition to Lineament A also were seen on three sets of aerial photographs examined for this review (Ref. 22) and linear fissures and other features were seen on the ground in the site reconnaissance. It is difficult to understand why Rockwell did not report seeing the same features described by Jacobs' previous consultants and seen in the aerial photograph examination and site reconnaissance for this review. This omission causes some doubt as to the completeness of his analyses. Lineaments are important for this investigation because they can indicate presence of faults or other geologic structures.

S-20

⑮

Rockwell's description of pediment surfaces also is unclear. He refers to late Pleistocene pavement and varnish development at trenches T-1, T-2, and T-3, but these features are not described in the trench logs. Instead, the trench logs describe aeolian deposits, which are categorically very young and would preclude development of pavement and varnish on any underlying surfaces. The description of aeolian deposits at these locations is consistent with the interpretation of Quaternary geology by Jacobs' previous consultants (Plate 4-1 of Ref. 20 and Figure 4.2.5 in the original Draft EIR/EIS) and field reconnaissance of the area found it to be covered with wind-blown sand rather than desert pavement.

⑯

Rockwell mentions surfaces that he estimates to be more than 100,000 years old but does not show their location on a map in his report. In contrast, the previous map (Plate 4-1 of Ref. 20) shows fan surfaces in the site as being early to late Holocene in age, or less than 10,000 years. The age estimates by Jacobs' different consultants apparently differ by orders of magnitude. These differences are important because the ages of the fan surfaces are used to interpret whether potentially active faults are present. Additional explanations and/or investigations are needed to resolve these discrepancies.

3.2.4 Trenching

Jacobs excavated and logged four trenches, each about 60 to 100 feet long (Ref. 9). This is an unusually small scope of investigation for the proposed 2100-acre landfill. The trenches are shown to approximate scale on Figure 4; they cover less than two percent of the site width.

⑰

The stated objective for the trenching was to investigate anomalies identified from the various geophysical surveys. However, Jacobs reported that the trench locations were selected to investigate GPR anomalies only and that they relied on the GPR to demonstrate absence of faulting along the remainder of the survey line. As noted above, GPR has not been used extensively for fault investigations in this area and validity of the method is not well established. Without great confidence in the GPR data, additional trenching would be needed to investigate the other geophysical anomalies. Moreover, this excessive reliance on the GPR method is contrary to the CDMG guidelines for faulting investigations (Ref. 18), which state: "Geophysical methods alone never prove the absence of a fault ..."

The trenching program was deficient in that it explored a minimal part of the site and that the trench locations were determined from excessive reliance on unproved geophysical methods. The four trenches had an aggregate length of about 300 feet, which is grossly inadequate for investigating a 2100-acre site. Investigating only the segments of the seismic reflection line where data were of very poor quality would require at least 3000 feet of trench. An additional consideration is that much of the area is covered with wind-blown sand that could obscure surface evidence of faulting and thereby reduce reliability of aerial photograph analyses. Reviews of this work by the SWRCB State geologists also concluded that it was inadequate to prove that no faults cross the proposed landfill and that a substantial number of additional geophysical anomalies were not checked (Ref. 10). ⑰ CONT.

3.3 Ground Fissures

The Draft EIR/EIS Supplement does not include additional investigations of existing or potential ground fissures at the proposed landfill site. This is an important omission. Ground fissures have been observed on the playa just south of the proposed landfill (see, for example, Plate 4-1 in Ref. 20) and Jacobs concluded that many of the anomalies seen in their GPR survey may be related to concealed subsidence cracks (Page 22 in Ref. 8).

Ground fissures are displacements of the surface soils. If they occur under the landfill they could damage the liner and cause leaks in the same manner as tectonic fault movements. Ground fissures could be a greater problem than faults because new fissures potentially could develop due to ground-water withdrawals and foundation loading associated with the landfill. Finding that fissures presently do not exist under the landfill may be inadequate to demonstrate that none could occur; it also would be necessary to determine whether site conditions indicate new fissures could form. ⑱

Jacobs (Ref. 20) identified a number of fissures but did not investigate them in any detail. Jacobs suggested that most of the fissures were caused by ground-water withdrawal, as that is a common cause of fissures on playas. In such cases, the fissures are caused by differential consolidation of the soils as the water table is lowered. This condition could be aggravated by the additional loading of the landfill. The consolidation occurs in beds below the water table and propagates upward toward the surface (see, for example, Ref. 23). Fissures, and related ground displacements, are particularly likely to develop over escarpments in the underlying bedrock (see, for example, Ref. 24), as indicated by Rail•Cycle's gravity survey near the southwest corner of the proposed landfill (Figure 3-12 in Ref. 20).

Ground fissures were not addressed adequately in the original Draft EIR/EIS and were not covered in the Supplement. Additional work in this area is needed.

3.4 Lineament A

The Jacobs Phase II report (Ref. 20) recognized Lineament A as being important to suitability of the Bolo Station site. Lineament A was described as a linear change in elevation extending for 3000 to 6000 feet on the Bristol Lake playa. Jacobs noted that Lineament A coincided with the probable fault in the basement rocks seen from their gravity survey and treated it as an active fault in their seismic hazard analysis (Figure 4-6 and Table 5-3 in Ref. 20). Jacobs recommended that Lineament A be investigated further by trenching and soil dating.

In the field reconnaissance for this review, Lineament A was seen to be a low escarpment on the playa surface. This feature is clearly evident on aerial photographs and its influences on the local minor drainages are obvious from both aerial photos and field inspections. The 1984 U.S. Geological Survey quadrangle map shows a local topographic high just east of this feature; the elevation is three to four feet above the playa surface just to the west. ⑲

The Draft EIR/EIS Supplement (Section 4.1.2.3.4) reported that Lineament A had been investigated and found to be a "lakeside feature" rather than a fault. This interpretation was based on the Jacobs geophysical and trenching investigations discussed above (Ref. 8 and 9). The conclusions summarized in the Supplement were reviewed and found to be incomplete and inaccurate.

The Supplement notes that the seismic refraction survey found the ground water table is continuous and unbroken along projection of Lineament A, indicating it does not continue under the site. As noted previously, this interpretation is not sound geology. The absence of changes in ground-water elevation does not demonstrate the absence of faults or lineaments. ⑳

The Supplement also cites the "continuous, unbroken deep bedrock reflector" seen in the seismic reflection survey as evidence that Lineament A does not continue under the site. As discussed previously and shown on Figure 5, the horizon interpreted as the bedrock reflector is not continuous and unbroken across the site. Moreover, the projection of Lineament A would intersect the seismic line in the interval between Stations 180 and 217, where the reflection data are disrupted for more than 600 feet. Even if the data were excellent in this interval, there is no assurance that the seismic reflection would detect Lineament A (or a related structure), as it has only a few feet of relief at the playa surface and its character at depth is not known. ㉑

㉒ The absence of displacements in Trenches 1 and 2 does not prove that Lineament A (or a related structure) cannot continue under the site. Trenches 1 and 2 had lengths of about 100 feet and 60 feet, respectively, and are located about a mile north of the surface expression of Lineament A. If the projection of Lineament A (or a related structure) deviated by about one degree of azimuth, it could miss these trenches entirely. Geologic structures almost never can be projected within one degree of azimuth.

㉓ The interpretation that Lineament A must be a lacustrine feature was made by Jacobs' consultant Dr. Rockwell (Appendix C in Ref. 9). His report suggests that he viewed the feature in the field but does not describe any trenching or other subsurface exploration along it. He described Lineament A as having no significant length or continuity with any known or hypothesized tectonic element. This indicates he must not have known that Lineament A is located above an escarpment in the basement rock that has more than 1000 feet of relief and was interpreted as a probable fault (Figure 4-6 in Ref. 20). As discussed above in Section 3.2.2, this probable fault is along the projection of faults that have been mapped in the Bristol Mountains to the northwest and the Calumet Mountains to the southeast. Rockwell also does not address the unusual linearity of this feature and its orientation oblique to the present shoreline.

㉔ The site investigations for Rail•Cycle have not addressed the possibility that Lineament A may be related to differential settlement of the underlying playa beds. A feature of this type would not continue beyond the area underlain by playa deposits and need not be related to regional tectonics. However, displacements caused by differential settlement could be a hazard to the landfill liner in areas underlain by playa beds, such as near the Cargill brine wells. Failure to address this possibility is a serious deficiency in the site investigations.

㉕ The investigation of Lineament A is incomplete and statements regarding this feature in the Supplement are inaccurate. The interpretation of Lineament A being lacustrine feature was made by a consultant who apparently was not aware of important additional information. The previous recommendation of Rail•Cycle's other consultant that the feature be investigated by trenching was disregarded.

The limited investigation of Lineament A is inconsistent with Rail•Cycle's previously cited comments on the proposed Cadiz Valley Development (Ref. 12) and Waste Management's reviews of the proposed Eagle Mountain Landfill (Ref. 27). In discussing possible faulting at the Eagle Mountain site, Waste Management said that investigations should include detailed mapping, field evaluation of photolineaments, and trenching alluvium overlying fault traces. Waste Management went on to comment that finding alluvium that does not appear to be offset at one location does not mean that the fault necessarily is inactive, suggesting need for multiple trenches along a suspected fault trend. In contrast, Waste Management's Rail•Cycle program has no trenches along the actual trace of Lineament A and has no assurance that Trenches 1 and 2 actually are along the projection of this feature. ㉕ CONT.

3.5 Buried Channels

Section 4.1.2.4 of the Supplement summarizes results from the investigation of possible buried channels below the landfill. This investigation was done along with the geophysical and faulting investigations (Ref. 8 and 9). The stated objective of this work was to identify buried gravel-filled channels that could be preferential ground-water flow paths. The reason for emphasizing gravel-filled channels is unclear. The ephemeral stream channels in this geologic setting typically are not gravel filled, but are filled with sand containing lesser percentages of gravel and silt. These sand-filled channels also would be preferential flow paths, as they could have hydraulic conductivities orders on magnitude higher than the surrounding fine-grained soils.

㉖ The channel investigation involved electromagnetic and resistivity surveys followed by drilling at three anomalies identified from the geophysics. The drilling did not find gravel channels but did find sand beds at and below the water table. Jacobs reported that two of the three borings found soils above and below the water table to be sandier than in other nearby borings (Page 16 of Ref. 9). Examination of the boring logs (Appendix A in Ref. 9) showed the water table to be within sand beds in each of the three borings.

The sandier soils found in the three borings could be buried channels, as the stream channels in this area typically are sand filled. The single geophysical line used in this investigation and the three borings drilled are not sufficient to determine whether or not channels are present.

Section 4.1.2.4.5 of the Supplement is inaccurate in stating that the borings found sand deposits generally located above the water table. This statement conflicts with Jacobs findings and their boring logs, as cited above. Moreover, it is incorrect to claim that the absence of gravel channels shows that there are no preferential flow paths. Sand-filled channels would be preferential flow paths as well.

3.6 Soil Consolidation

Section 4.1.3 of the Draft EIR/EIS Supplement summarizes additional evaluations of potential for the natural soils underlying the site to consolidate under the load of the proposed landfill. Results of additional drilling and engineering analyses are cited as indicating that consolidation would be less than calculated previously. Review of the background technical documents indicated that the data are not complete and some important factors relating to soil consolidation were not addressed.

The revised calculations of soil consolidation are described in Jacobs Project Note 94 (Ref. 25) and refer to additional information on soil properties obtained from the drilling to install new monitoring wells in late 1992 (Ref. 26). However, neither report contains results of laboratory tests measuring consolidation properties of the soil. The Supplement also cites laboratory tests on samples from the 500-foot boring drilled in Section 16 as supporting the revised calculations. However, the cited report (Ref. 7) shows that samples were tested from only four depths and that the testing was done in June 1993, although the revised calculations (Ref. 25) had been reported to Rail•Cycle in May. From review of the cited reports, it is impossible to determine whether the revised calculations are based on engineering tests or whether they are merely an assumption that the soils would perform more favorably. ㉗

Review of the boring logs from the 1992 drilling found that soils underlying the southwest part of the proposed landfill, near the Cargill brine wells, are poorly consolidated such that consolidation and differential settlement are likely to be greater than expected. Figure 7 shows locations of two subsurface profiles along the west and south sides of the landfill, near the brine wells. The profiles are Figures 8 and 9. The soil classifications on these profiles were taken from Jacobs' boring logs (sources are cited on the figures).

A plot of dry density reported from Jacobs' tests on soil samples from each boring is shown alongside the plot of soil classifications. The dry density of a soil sample is an important measure of the soil's potential for additional consolidation. Other factors being equal, soils having lower dry density have more void space (porosity) and would consolidate more under an applied load. Soils with dry densities less than about 90 to 100 pounds per cubic foot (pcf) typically are considered poorly consolidated and susceptible to large settlements. Rail•Cycle has emphasized that wet density of the soil is used in calculating settlement (Ref. 28). While the wet, or total, density of soil is used to determine the overburden pressure on a soil layer for settlement calculations, the dry density of the soil layer indicates its potential for additional consolidation. Accordingly, dry density of soil is routinely measured in geotechnical work and is commonly used to evaluate suitability of soils for foundation loading. For example, dry density of fill soils is measured to determine whether they have been compacted adequately. ㉘

㉘ CONT.

Low and variable soil densities are seen in the data compiled on Figures 8 and 9. Particularly low densities of less than 80 pcf are seen in the samples taken from just below the water table in borings MW5A, MW8, MW9, and MW10. These borings are all in the southwest part of Section 17, in the area close to the brine wells. The occurrence of low-density soils at about the same depth in borings that are located in the same part of the site indicates presence of a poorly consolidated soil zone. These low-density soils are found in borings close to the present playa, which is consistent with the geologic setting. This zone is not addressed in the Supplement or in the supporting technical documents. This zone could reduce stability of the landfill foundation in the area of the Cargill brine wells, increasing potential for failures that could contaminate these wells. ㉙

An additional related concern is the lack of deeper exploration in this area. The borings in this part of the site are 100 to 120 feet deep. (Two 350-foot borings recently were drilled by P.E. LaMoreaux & Associates for Rail•Cycle but there are no reports of geotechnical tests from those holes.) About a mile to the east of the brine wells, low-density soils were found to the 200-foot total depth of MW7 (Figure 8). Additional drilling and testing are needed to determine maximum depth of low-density soils near the brine wells. ㉚

The investigations of soil consolidation are not complete. Additional work is needed to demonstrate that this area is suitable for the proposed landfill.

3.7 Ground Water

Section 4.2.2 of the Supplement contains brief discussions of ground-water recharge, hydraulic gradients, and water quality. A contour map is included (Supplement Figure 4.2.1), based on water levels measured in April 1991. This contour maps shows that ground water under a large part of the landfill flows toward the Cargill brine wells, emphasizing the potential for leaks from the landfill to contaminate the brine wells.

The investigations of ground water for the proposed landfill are inadequate in that they have not addressed potential flow paths from the landfill to the brine wells and have not characterized the site sufficiently to design a reliable monitoring system. Comments in this regard were transmitted previously (Ref. 3) and monitoring systems are discussed further in Section 4.5 of this review.

Rail•Cycle has undertaken additional exploration and testing to partially address the deficiencies in ground-water characterization of the Bolo Station site. As discussed in Section 3.1, preliminary information on this work was obtained in a field briefing with BLM personnel on January 10, 1994. We understand that the additional work has included drilling of two 350-foot borings and construction of two deep test wells (HAL-1 and HAL-2, Figure 1) in the southwest corner of Section 17, near the Cargill brine wells. A 72-hour pumping test was run in new well HAL-1, while monitoring water-level changes in HAL-2, several of the Rail•Cycle shallow monitoring wells, and nearby Cargill wells. A number of water samples also were taken for chemical analyses during the test. This testing apparently is continuing, as measurement devices were still in place as recently as February 6, 1994.

㉛ We understand that preliminary information from the recent testing contradicts the description of ground-water conditions in the Draft EIR/EIS and the Supplement in several important areas. For example, the descriptions and analyses of ground water at the site have assumed a single water-bearing zone with no vertical gradients. In contrast, water levels in the new HAL-1 and HAL-2 wells were found to be 15 feet lower than in the nearby water-table monitoring wells, indicating presence of substantial downward gradients. These gradients cannot be evaluated completely because Rail•Cycle has only the two deeper wells and because their wells are screened over large intervals. Based on the available information from the recent testing, it is clear that the previous descriptions of the ground-water system are incorrect.

The descriptions of ground water in the Draft EIR/EIS and in the Supplement cannot be considered even arguably complete without being corrected to reflect the information from Rail•Cycle's recent additional testing. Results of the recent pumping test are particularly needed to evaluate potential impacts on the Cargill brine wells. Needs for possible additional exploration and testing will be evaluated after these results are reviewed.

3.8 Mineral Resources

Two topics regarding mineral resources at the proposed landfill site are discussed in Section 4.3 of the Supplement. The investigation of on-site mineral resources and the description of conditions affecting brine production are reviewed below.

3.8.1 On-Site Mineral Resources

The Supplement (Section 4.3.2) concludes that the proposed landfill site does not contain mineral resources having present economic value, based largely on a poorly-founded exploration program by Rust Environment and Infrastructure (Ref. 29). Rust is advertised as the technology arm of WMX Technologies, which is the parent company of Waste Management, a partner in Rail•Cycle.

Rust drilled one 500-foot boring near the southwest corner of Section 16 (BLM-1, Figure 1). The stated objective of this boring was to investigate possible presence of evaporite deposits and mineralized ground water below the 200-foot depth of the previous exploration. Sampling and analyses of ground water samples from nearby MW7 had shown that salinity increased exponentially from depths of 70 to 200 feet, and calculation in Appendix D of the Draft EIR/EIS had determined that the 200-foot samples exceeded the BLM threshold criteria for economic concentrations of sodium chloride.

The Rust boring was cored at selected intervals and the core was examined by their geologist. Rust reported no chemical analyses of core or fluid samples. The boring log records that samples were tasted to estimate salinity.

㉜ Based on this limited investigation, Rust concluded that leachable/mineable quantities of ground water are not present at this location. This conclusion is repeated in the Supplement. Rust claimed that effective ground-water extraction would be possible only in the sandy beds above 275 feet depth in their boring. Rust interpreted these beds to be "distal alluvial fan deposits" and theorized that these deposits could not contain brine because they are not lake beds. Rust also theorized that ground water could not be produced from the underlying lake beds because moisture levels decreased and because that sequence contained only a few thin sand beds. The boring log in this report (Attachment A to Ref. 29) actually described 60 feet of saturated sand beds in the interval from 284 to 484 feet depth, indicating that a properly designed well could produce substantial volumes of water. The log of this same boring then was revised for a later report (Ref. 7) to decrease the indicated thicknesses of the sand beds.

The recent testing for Rail•Cycle by P.E. LaMoreaux & Associates proved Rust's theories to be incorrect. LaMoreaux's test well HAL-1 is located near the southwest corner of Section 17, about a mile west of Rust's BLM-1 boring (Figure 1). Well HAL-1 reportedly was completed from 210 to 350 feet depth and produced concentrated brine with total salinity of more than 100,000 ppm (parts per million). LaMoreaux reportedly ran complete chemical analyses on several samples of brine from this well. Well HAL-1 reportedly was pumped at about 50 gpm in a 72-hour test with no decrease in salinity or production rate.

Results of the LaMoreaux tests clearly conflict with the Rust theories presented in the Supplement. Complete results of the recent testing and revised evaluations of mineral resources at the site are needed for the Draft EIR/EIS and the Supplement to be accurate. ㉜ CONT.

3.8.2 Conditions Affecting Brine Production

Section 4.3.3 of the Supplement addresses production from the Cargill brine wells, based on inaccurate descriptions of conditions at the wells. The Supplement claims that the Cargill wells are installed in "... relatively incompressible, coarser grained interbeds within the transition zone." This information is referenced to two reports by Rust. One of these (Rust Environment and Infrastructure, Bolo Station Landfill, Report of Disposal Site Information, June 1993) was not available for this review. The other (Ref. 30) was a summary of previous work by others and contained no original information on the brine wells. There is no record of Rust having drilled or otherwise explored the areas adjacent to the brine wells to determine nature of the beds at the well depths. Accordingly, the referenced statement appears to be unfounded speculation. ㉝

Information regarding the brine wells was researched for this review. The three producing wells were drilled in 1965 to 1979 by cable tool rigs. Drillers' logs from two of these wells were obtained recently from the County of San Bernardino. These records show that the wells are screened from 120 to 300 feet depth. The soils in these intervals are described as clay and sandy clay with layers of rock salt, gypsum chips, and broken rock or gravel. The layers described as broken rock or gravel appear most likely to be zones of evaporite cementation in the lake bed. Information also was obtained from GSI Water of South Pasadena, the consultant to Cargill (then Leslie Salt) on installation of these wells. GSI had their geologist's log from drilling of the third well; it was similar to the drillers' logs in describing the completion interval as being mainly clay and sandy clay with layers of evaporite or limestone cementation. ㉞

Dr. Joe Birman of GSI expressed the opinion that flow to the Cargill wells is largely in very thin laminations of sandier soil within the predominantly clayey lake beds. A laminated sequence was not described in the logs, but probably would not be recognized in cable-tool drilling. If such laminations are present, they are likely to be variations

between sandy silty clay and clayey silty sand (or other such mixtures), based on the available logs.

The only deep core hole in the area of the Cargill brine wells is the HAL-1 boring recently drilled by P.E. LaMoreaux & Associates for Rail•Cycle. The preliminary information from this boring (provided by LaMoreaux staff) indicated that coarse grained interbeds were not found in the interval equivalent to the completion zone of the Cargill brine wells. It is not known whether the HAL-1 core shows the laminations suggested by Dr. Birman. ㉞ CONT.

The discussion in the Supplement of conditions affecting brine production is not accurate or complete. It appears to be based on unfounded speculation, referenced to the Rust affiliate of Waste Management. Preliminary information from the recent HAL-1 boring does not indicate presence of the relatively incompressible coarser grained interbeds suggested in the Supplement. These beds also were not reported in the drillers logs obtained for the Cargill wells. Additional exploration is needed to accurately determine conditions affecting brine production. The completed report on the recent LaMoreaux work for Rail•Cycle may be helpful in this regard.

4.0 IMPACT EVALUATIONS

This section reviews the evaluations of impacts and mitigation measures in Section 5.0 of the Supplement. Organization of this section generally follows the order of topics in Section 5.0 of the Supplement.

As discussed in the preceding section, the descriptions of the affected environment were found to be incomplete and inaccurate in many regards. Because of these deficiencies, the impact evaluations are similarly incomplete and inaccurate. Detailed evaluations of specific topics are in the following sections.

4.1 Impacts from Faults

The Supplement (Section 5.1.1.1) concludes that absence of Holocene (active) faulting has been verified by the 1992 site investigations (Ref. 8 and 9) and that the landfill will not be impacted by seismic activity. As discussed at length in Section 3.2 of this review, the investigations of faulting at the proposed Bolo Station site are incomplete and have produced conflicting results. Accordingly, this impact evaluation cannot be considered complete and accurate. A large amount of additional work will be needed to reliably determine whether or not active faults are present at this site. ㉟

4.2 Impacts from Ground Fissures

The Supplement does not address ground fissures, although these features are known to exist just south of the site and were interpreted by Jacobs as a probable source of many anomalies seen on the GPR survey at the site (Page 22 in Ref. 8). Ground fissures are displacements of the earth materials underlying the site and may damage the landfill liner and cause leaks in much the same manner as tectonic faults. ㊱

Investigation of ground fissures can be more complex than fault investigations. In addition to determining the locations of existing fissures, it would be necessary to understand the mechanism for development of fissures in this environment and to investigate the potential for new or enlarged fissures to form under the expected conditions of ground-water withdrawal and the added loading from the proposed landfill. Additional work is needed to evaluate potential impacts to the proposed landfill from ground fissures.

4.3 Impacts from Buried Channels

Supplement Section 5.1.1.1.2 states that geophysical surveys and borings verified the absence of gravel channels below the water table. This not an accurate description of results from the Jacobs programs (Ref. 8 and 9).

The stated objective of the channel investigation was to identify buried gravel channels, because these could be preferential flow paths. As discussed in Section 3.5 of this review, gravel-filled channels generally do not occur in this environment but sand-filled channels are common. Jacobs identified three geophysical anomalies and drilled to 20 feet below the water table at each. The water table was reported to be within a sand layer at each boring. Jacobs reported that two of the three borings found soils above and below the water table to be sandier than in other nearby borings (Page 16 of Ref. 9). Additional investigations were not performed to determine whether the sandier soils were in buried channels. ㊲

Sand-filled channels would be preferential flow paths, as the sand could have hydraulic conductivity orders of magnitude higher than the surrounding fine-grained soils. As a result, ground water would move more rapidly through the buried channels and possible contaminants could migrate at greater-than-expected rates. Additional work is needed to assess potential impacts from this site condition.

4.4 Impacts from Soil Consolidation

Section 5.1.1.2 of the Supplement discusses several impacts related to soil consolidation. These impact evaluations are based on Rail•Cycle's estimates of the potential for soils at the site to consolidate under the expected additional loads. As discussed in Section 3.6 of this review, there are a number of questions regarding the analyses in the reports cited. Most notably, there is no indication that the consolidation analyses adequately considered the very low densities and high water contents of soils samples from borings in the southwest part of the site, near the Cargill brine wells. These samples indicate presence of poorly consolidated soil layers that could compress greatly under the proposed very large landfill. Similar low-density soils were found to the 200-foot total depth of MW7, about a mile east of the brine wells. Additional exploration and testing is needed to evaluate soil consolidation accurately and completely. The evaluation of impacts from soil consolidation cannot be completed until the required additional work is done. ㊳

The discussion of potential for differential settlement in Section 5.1.1.2.3 of the Supplement is not supported by data ㊴ presented in the description of the affected environment and does not accurately describe information from the supporting technical reports. The supplement claims that differential settlement would not occur at this site because changes in soil type are expected to be gradual at the margins of playas and because abrupt changes were not seen from the geophysical surveys and drilling programs at the site. These statements are inaccurate.

The playa margin inherently is a contact between dissimilar soil types. For example, the present edge of Bristol Lake is marked by the change from the silt and clay of the playa to the sand hills along the south part of the proposed landfill site. In some areas these transitions may occur gradually but there is no assurance that abrupt changes cannot occur.

The ground fissures seen on the Bristol Lake playa demonstrate that differential settlements can and do occur in this area. Fissures were mapped on the playa surface by Jacobs and their consultants (Plate 4-1 in Ref. 20) and Jacobs interpreted ground fissures to be the probable source of many anomalies seen on the GPR survey at the site (Page 22 in Ref. 8). ㊴ CONT.

Data from the Rail•Cycle drilling programs do not show that there are no abrupt changes in lithology (soil classification) under the landfill, as claimed in the Supplement. The profiles in Figure 8 and 9 were prepared from logs of Rail•Cycle borings, including the well installations and investigation of buried channels in September 1992. It is notable that similar profiles are not included in the Supplement or the supporting technical reports. Examination of these profiles shows essentially no soil layers that can be correlated from one boring to the next. Although all the borings were logged by the same company (Jacobs) and many were logged by the same person, the logs do not appear similar. These changes demonstrate that soil classifications are extremely variable at this site.

The soil densities plotted on Figures 8 and 9 also show marked changes. For example, the samples at 80 feet depth in MW8 and MW9 had very low densities of about 75 pcf (Figure 9). In the closest borings to the north, MW3 and MW3A, soils at similar depths have much higher densities of more than 100 pcf. This contrast in soil density indicates substantially different in potential for the soils to consolidate under a load, causing differential settlement.

The discussion of differential settlement in the Supplement is not complete and accurate. Additional investigations are needed to determine potential for differential settlements to occur and to evaluate the resulting impacts on the proposed landfill.

4.5 Impacts on Ground Water

The proposed mega-landfill could impact ground water in a number of ways. The Supplement discusses these impacts in two categories: impacts on ground-water quantity and flow, and impacts on ground-water quality. Impacts on quantity and flow are inaccurately determined, as they are based on incomplete and incorrect descriptions of ground-water conditions at the site. These are reviewed further with regard to impacts on mineral resources, in Section 4.6 of this report.

㊵ The evaluation of potential for contaminant migration was found to be based on incorrect and/or incomplete descriptions of ground-water conditions in the area. The proposed monitoring systems for the unsaturated zone and the ground water are unproved and do not meet typical State and EPA standards; deficiencies have been noted in reviews by the State and the EPA. These monitoring systems do not assure that releases would be detected. Releases from the landfill would contaminate the brine wells and corrective measures that could be implemented would impact brine production.

4.5.1 Potential Contaminant Migration

㊶ Potential migration of gas and leachate from the landfill is discussed in Supplement Section 5.2.1.2.2. These discussions are not supported by data presented in the Affected Environment section of the Supplement but instead are referenced to analyses in separate reports prepared by Rust Environment and Infrastructure, a consulting company affiliated with Waste Management. The Rust analyses are based on incorrect descriptions of the ground-water system at the site and are therefore unreliable. Unreferenced statements in the Supplement also are inaccurate.

㊷ The evaluations discussed in the Supplement assume that vertical hydraulic gradients do not occur at the site. There was no basis for this assumption in the Rust reports and the Supplement, as the monitoring wells at the site are completed only at the water table and cannot measure vertical gradients. The deeper HAL-1 and HAL-2 wells that were recently installed in the southwest corner of Section 17 reportedly were completed at depths of 210 to 350 feet and showed water levels about 15 feet deeper than the nearby water-table wells, demonstrating presence of a substantial vertical gradient. The reported gradient indicates that ground water flows downward from the water table to the deeper zones.

The Supplement (page 5.5-5) describes the Cargill wells as being screened at 270 feet depth in "coarser grained sands

S-20

and silty sands." The Supplement goes on to say that these coarse sand beds are "... separated from the water table by the interbedded, very fine grained silt clay and silts." These descriptions are not referenced to any source and there is no indication that Rail•Cycle or the Supplement authors reviewed information on conditions at the production intervals of the Cargill brine wells. The Drillers' Logs from the Cargill wells that were recently obtained from San Bernardino County contradict the descriptions in the Supplement. These logs report that the wells are screened from 120 to 300 feet depth and do not describe sand beds in the production intervals. Preliminary information from the HAL-1 core hole recently drilled for Rail•Cycle a few hundred feet north of the brine wells also contradicts this description. This boring reportedly did not find coarse sands in the deeper interval and did not find any beds of "fat" clays.

㊸

The Supplement suggests that the production zones of the Cargill brine wells are not connected to ground water at the water table, stating: "For these wells to maintain downward hydraulic gradients at the water table, they must overcome the very low hydraulic conductivities of these silt/clay interbeds, as well as the hydraulic pressures caused by the southerly flow of regional ground water into the production zones." (Supplement page 5.2-5) This statement is obviously incorrect. The cone of depression defined by Rail•Cycle's water level measurements at the uppermost ground water (Supplement Figure 4.2.1) demonstrates that pumping at the brine wells is affecting the water table. The cone of depression is caused by water flowing from the water table toward the production levels of the brine wells. If there were no connection between the production interval and the water table, the cone of depression would not form.

The Supplement incorrectly references the Rust report on alternative liner evaluation (Ref. 31) as calculating that downward movement of contaminants would be only about three feet even if a significant vertical gradient is assumed. Review of the cited report found no consideration of vertical gradients or vertical transport. Another Rust report (Attachment I to Ref. 30) did calculate that only three feet of vertical movement would occur during transport of contaminants across the site to the monitoring wells. However, these calculations assumed a very low vertical gradient of 0.005 ft/ft. The vertical gradient indicated by water levels at the HAL-1 well is on the order of 0.15 ft/ft, or about 30 times greater than assumed in the Rust calculations. If this higher gradient is used in flow calculations, the resulting vertical migration would be increased accordingly.

The analysis of potential impacts from migration of gas and leachate was found to be based on incorrect assumptions

S-20

㊸ CONT.

regarding site conditions and inaccurate references to source documents. These impacts need to be reevaluated after site conditions are characterized reliably.

4.5.2 Unsaturated Zone Monitoring System

㊹

The Supplement describes the proposed unsaturated zone monitoring system as providing assurance that releases would be detected before impacting ground water. However, review of the proposed system indicates that it is unproved and unlikely to work as described.

Rail•Cycle proposes to use an "innovative" system for monitoring the unsaturated zone below the landfill (Ref. 32). The Supplement and the related technical reports do not state whether the proposed system has been used successfully at other locations, or whether it has been demonstrated in a field-scale test. Review of this proposed system by the SWRCB (Ref. 33) concluded that Rail•Cycle needed to submit more information to justify its use.

For the 60-acre cell proposed closest to the Cargill brine wells, the proposed monitoring would involve drawing air by vacuum through a three- or four-inch layer under the liner. Air from under the entire cell would be combined at one outlet and tested for selected volatile compounds. Even if this system worked as proposed, it is possible that a composite sample combined from the entire 60-acre (2.6 million square foot) cell would be diluted such that even a very large release might not be detected. It also is not clear how this system would assure that air is drawn from the entire layer, or how the operators would recognize damage. The description of this system does not indicate how it would act if part of the liner, and the underlying gas-monitoring layer, were damaged due to movement of the underlying soils. Additional demonstrations are needed to provide confidence in this unproved system.

4.5.3 Ground Water Monitoring System

㊺

A very reliable ground-water monitoring system would be needed if the landfill is to be constructed immediately upgradient of the Cargill brine wells, as proposed. There must be extremely high confidence that the ground-water monitoring system will detect releases from the landfill before the brine wells are contaminated. This ground-water monitoring system must be designed and operated in accordance with the most stringent State and EPA standards, and with best industry practice.

Rail•Cycle proposes to monitor ground water with downgradient wells located about 1000 feet apart (Supplement Figure

5.2.2). The proposed 1000-foot well spacing is unusually wide, and appears inadequate for this site, considering the depth to water and proximity to the Cargill brine wells. Well locations are determined without regard to geology or ground-water conditions. The monitoring wells proposed for the part of the landfill near the Cargill brine wells were installed in September and October 1992 and have screen lengths of 55 to 70 feet (Ref. 26).

The proposed ground-water monitoring system does not comply with typical EPA and State standards, and it would not be adequate to assure detection of releases from the landfill before the brine wells could be contaminated. Thorough characterization of local hydrogeologic conditions is needed for design of a proper ground-water monitoring system. A large amount of additional work is needed, including: investigating stratigraphy and identifying water-bearing units to at least the depth of the brine wells, determining base of the uppermost aquifer, and investigating vertical gradients. Typical standards for the site characterization needed to design a suitable ground water monitoring system are described in an EPA technical guidance document (Ref. 34). (45) CONT.

Requirements for the ground-water monitoring system will have to be evaluated further after site characterization is completed properly. Reviews by the SWRCB noted that wells are not installed at optimum locations (Ref. 11 and 33). A review by the EPA (Ref. 35) expressed concern that the proposed monitoring system does not account for stratigraphic complexity and vertical gradients, particularly in the southwestern part of the area (near the Cargill brine wells).

The screen lengths proposed by Rail•Cycle are unusually long. The EPA and California agencies typically require monitoring wells to have screens no longer than 10 to 20 feet (see, for example, Ref. 34). The 55- to 70-foot screens used by Rail•Cycle would not allow collection of representative samples from the uppermost ground water and could interconnect different water-bearing zones. For example, well MW-5A (Ref. 26) is screened across a 7-foot thick clay bed that could separate different water-bearing zones. Rail•Cycle claims that long well screens are needed to cover the potential range of water levels, but separate wells with different screen depths may be needed. Reviews by the SWRCB recommended screen lengths of no more than 10 or 15 feet (Ref. 11 and 33). A SWRCB geologist commented that ..."ground water samples taken from these wells will be significantly diluted thereby reducing the ability of the wells to provide the earliest possible leak detection." (Ref. 11, Page 3). (46)

(47) Reviews by the SWRCB (Ref. 33) and the EPA (Ref. 35) expressed concerns that monitoring wells along the facility boundary would be inadequate for monitoring the proposed large landfill. These reviewers commented that the proposed wells would be as much as one to two miles from possible release locations, and that these distances are too great. This is a particular concern with regard to possible contamination of the brine wells. Because of the stratigraphic complexity and vertical gradients in the southwestern part of the Bolo Station site, a release from the landfill potentially could enter the ground water and migrate to the brine wells without being detected by the water-table wells at the facility boundary. (47) CONT.

The Supplement proposes that ground water monitoring would not be used for leachate evaporation ponds that may be constructed. This is inappropriate. The leachate evaporation ponds would be surface impoundments containing liquid wastes, and would pose a significant threat of leakage that could contaminate the underlying brine resources. Any surface impoundments constructed along with the landfill require ground water monitoring as well. (48)

4.5.4 Impacts from Ground-Water Contamination

Releases from the proposed landfill could contaminate the underlying ground water. An evaluation of the proposed design for the Bolo Station landfill concluded that the liner system will not prevent leachate, VOC vapors, or biogenic gasses from leaking into the environment (Ref. 36). (49)

The discussion of potential impacts to ground-water quality in Supplement Section 5.2.1.2.2 assumes that the unsaturated zone monitoring system and the downgradient monitoring wells would detect releases from the landfill so that corrective action could be implemented and impacts to ground water would be prevented. As discussed above, the proposed monitoring systems are unproved and do not comply with applicable standards. There is no assurance that they would provide the assumed detection of releases. Undetected releases could contaminate the Cargill brine wells

Even if releases could be detected as assumed, there is no description of the corrective action that would be used. Considering the proposed size of the Bolo Station landfill, the operators may refuse to remove the waste to repair the liner. Excavating contaminated soil to the water table may be infeasible in this setting. Corrective action in this setting most likely would require pumping and treating the ground water and/or installing pumping wells to reverse the hydraulic gradient and prevent further migration. Even if effective, any system of this type certainly would impact production at the brine wells and may prevent their continued use. (50)

4.6 Impacts on Mineral Resources

Supplement Section 5.3 discusses two potential impacts on mineral resources: impacts on brine production and impacts on brine quality. The potential impacts on brine quality are mainly the same as the impacts on ground-water quality discussed above in Section 4.5 of this review. Leaks from the landfill would contaminate the brine wells and corrective actions that may be implemented would affect brine flow.

The evaluation of potential impacts on brine production is based on incorrect information. This evaluation assumes that the Cargill brine wells produce from coarse-grained beds that would be unaffected by ground settlement. As discussed in Sections 3.8 and 4.5.1, this assumption is unfounded and conflicts with available data. (51)

The evaluations of potential effects from consolidation of soils under the increased load from the landfill are based on the consolidation estimates reviewed previously in Sections 3.6 and 4.4. These estimates are based on incomplete information and appear to be unrealistically low. (52)

Overall, the evaluations of potential impacts on mineral resources were found to be incomplete and based on inaccurate information and assumptions. These impacts need to be evaluated thoroughly based on a more complete understanding of site conditions. However, construction of the landfill as planned almost certainly will cause adverse impacts on the Cargill brine wells. Recognizing the high probability that the proposed landfill will leak (Ref. 36), the brine wells would be contaminated and corrective action would be needed. When the brine wells become contaminated, they could no longer be used. Potential corrective actions, even if effective, also would affect brine production. As a result, adverse impacts on the brine wells probably cannot be avoided if the landfill is constructed as proposed. (53)

5.0 SUMMARY OF CONCLUSIONS

This technical review of the Draft EIR/EIS Supplement found it to be incomplete and/or inaccurate in a number of important areas, many of which are related to potential impacts on the Cargill brine wells. Table 1 outlines a number of the most important deficiencies identified, along with cross references to the related sections of the Supplement and to the discussions in this report. The conclusions from this review are summarized in this section.

Alternatives to the proposed site were not considered completely. Two potentially suitable "locales" were improperly eliminated on the basis of incorrect or inaccurate information on land use and geology.

The descriptions of the affected environment were found to be incomplete and inaccurate. The description of subsurface soils and ground-water conditions are incomplete and do not include recent information that conflicts with the interpretations presented. The investigation of faults at the site is incomplete and presents conflicting interpretations. Ground fissures were recognized at the site but have not been investigated. A prominent lineament that projects toward the site was identified by Rail•Cycle's consultants as possible evidence of active faulting or fissuring but was not investigated completely. The descriptions of mineral resources at the site are based on incomplete exploration and theories that have been proven incorrect by recent exploration and testing performed for Rail•Cycle.

The evaluations of potential impacts from the proposed landfill are largely based on incomplete and/or inaccurate descriptions of the affected environment, and are therefore unreliable. The evaluations of potential for leaks from the landfill to contaminate the underlying ground water and brine are a particular concern with regard to the brine wells. These evaluations are based on incomplete and incorrect descriptions of the hydrogeologic conditions at the site. The Supplement assumes that the proposed monitoring of the unsaturated zone and the ground water will detect releases before ground water is contaminated. However, the proposed unsaturated zone monitoring system is unproved and appears unlikely to work as planned. The proposed ground water monitoring system is based on inadequate site characterization and does not comply with the applicable EPA and State standards. Deficiencies in the proposed monitoring systems have been noted in reviews by the EPA and the State.

Construction of the landfill as planned almost certainly will cause adverse impacts on the Cargill brine wells. An evaluation of the proposed design for the Bolo Station landfill concluded that the liner system will not prevent leachate, VOC vapors, or biogenic gasses from leaking into the environment. Leaks from the landfill would contaminate the brine wells and prevent further use. Corrective actions that could be used to control or treat contamination in the ground water also would affect brine production. As a result, adverse impacts on the brine wells probably cannot be avoided if the landfill is constructed as proposed.

REFERENCES

1 Jacobs Engineering Group, 1990, Phase I: Geology, hydrogeology and hydrology site characterization study, Bolo Station facilities, San Bernardino County: Report for Rail•Cycle, October 1990.

2 Jacobs Engineering Group, 1991, Alternative Rail•Cycle landfill sites, preliminary analysis, San Bernardino County: report prepared for Rail•Cycle December 1990, updated May 1991.

3 Morris A. Balderman/Consulting Geologist, January 12, 1993, Technical review of Draft EIR/EIS, Rail•Cycle Bolo Station Landfill, San Bernardino County, California: Consultant report to Cargill Salt Company, submitted as comment on Draft EIR/EIS

4 BLM, 1993, State of California wilderness status map: January 21, 1993

5 BLM, 1991, Cady Mountains CDCA-251, Desert District, California Wilderness Study Areas Map-79.

6 Dibblee, T.W., Jr., 1967, Geologic map of the Ludlow Quadrangle, San Bernardino County, California: U.S. Geological Survey Map I-477.

7 Rust Environment and Infrastructure, 1993, Bolo Station landfill hydrogeological and geotechnical assessment 500-foot borehole: Report prepared for Rail•Cycle, October 7, 1993

8 Jacobs Engineering Group, 1992, Geophysical survey report, Bolo Station Facilities, San Bernardino County; Report prepared for Rail•Cycle, December 1992.

9 Jacobs Engineering Group, 1993, Geophysical field exploration report, Bolo Station Facilities, San Bernardino County; Report prepared for Rail•Cycle, March 1993.

10 James M. Parsons, State Water Resources Control Board, October 21, 1992, Meeting report: Rail•Cycle's proposed Bolo Station mega-landfill near Amboy, San Bernardino County: October 16, 1992 inspection of trenches.

11 Charles Nesmith, State Water Resources Control Board, August 11, 1993, Comments on the Rail•Cycle Bolo Station landfill Report of Waste Discharge

12 Rail•Cycle, 1993, Comments on Cadiz Valley Development DEIR: Letter to County of San Bernardino, August 11, 1993

13 Howard, K.A. and Miller, D.M., 1992, Late Cenozoic faulting at the boundary between the Mojave and Sonoaran blocks: Bristol Lake area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: San Bernardino County Museum Special Publication, p 34 - 47.

14 Dokka, R.K., 1983, Displacements on late Cenozoic strike-slip faults of the central Mojave Desert, California: Geology, v 11, P 305 -308.

15 Wesnousky, S.G., 1986, Earthquakes, Quaternary faults, and seismic hazard in California: Journal of Geophysical Research, v 91, p 12587-12631.

16 Hart, E.W., and others, 1987, Summary report: Fault evaluation program, 1986-1987, Mojave Desert region and other areas: California Division Mines and Geology Open-File Report 88-1LA

17 Jennings, C.W., 1992, Preliminary fault activity map of California: California Division Mines and Geology Open-File Report 92-03

18 Hart, E.W., 1990, Fault-rupture hazard zones in California: California Division Mines and Geology Special Publication 42.

19 Shawn Biehler, Ph. D., 1991, Gravity and magnetic studies of the Rail•Cycle project site, San Bernardino County, California; Report prepared for Jacobs Engineering Group, May 28, 1991.

20 Jacobs Engineering Group, 1991, Phase II Geologic, hydrogeologic, and geotechnical site characterization study, Bolo Station Facilities, San Bernardino County; Report prepared for Rail•Cycle, December 1991.

21 Howard, K.A. and John, B. E., 1984, Geologic map of the Sheep Hole-Cadiz Wilderness Study Area, San Bernardino County, California, U.S. Geological Survey Map MF-1615-A

22 Aerial photographs:
USGS, VFBO, October 1981, 1:24,000 (B/WIR)
USGS, N3515, June 1984, 1:58,000 (CIR)
Continental Aerial, March 1993, 1:12,000 (B/W)

23 Helm, D.C., 1992, Hydraulic forces that play a role in generating fissures at depth: Proceedings of the 35th annual meeting, Assoc. Engineering Geologists, p 7 - 16

24 Holzer, T.L., 1984, Ground failure induced by groundwater withdrawal from unconsolidated sediment: Geol. Society America Reviews in Engineering Geology, v VI, p 67 - 105.

25 Jacobs Engineering Group, 1993, Project Note No. 94; Report prepared for Rail•Cycle, May 13, 1993.

26 Jacobs Engineering Group, 1992, Groundwater monitoring well installation report, Bolo Station Facilities, San Bernardino County; Report prepared for Rail•Cycle, December 30, 1992.

27 Waste Management of North America, Inc., 1991, Comments on the Eagle Mountain Landfill Project Draft EIR/EIS; September 23, 1991

28 Rail•Cycle, 1993, Technical report: Response to Bureau of Land Management inquiries regarding settlement calculations for Bolo Station landfill: October 8, 1993

29 Rust Environment and Infrastructure, 1993, Evaluation of potential commercial mineral deposits associated with the Bureau of Land Management's request at Bolo Station Landfill, Amboy, California; Report prepared for Rail•Cycle, June 1, 1993.

30 Rust Environment and Infrastructure, 1993, Bolo Station landfill summary report of potential groundwater impact and ground settlement issues: Report prepared for Rail•Cycle, June 14, 1993

31 Rust Environment and Infrastructure, 1993, Bolo Station landfill alternative liner design evaluation report: Report prepared for Rail•Cycle, March 1993

32 Kerfoot and Associates, and Robert D. Gibbons, Ph.D., January 29, 1993, Unsaturated-zone monitoring plan for the Rail•Cycle Bolo Station landfill, San Bernardino County, California; report prepared for Rail•Cycle.

33 James M. Parsons, State Water Resources Control Board, January 13, 1993, Memorandum: Rail•Cycle's proposed Bolo Station mega-landfill near Amboy, San Bernardino County: October 1992 preliminary design package

34 U.S. Environmental Protection Agency, 1992, RCRA ground water monitoring: Draft technical guidance: EPA/530-R-93-001

S-20

---

35 Deanna M. Wieman, Director, Office of External Affairs, EPA Region IX, February 26, 1993, Review of Draft EIR/EIS for Rail•Cycle Bolo Station landfill

36 Brown, K.W. and Nelson, L.D., 1993, An assessment of the potential for environmental contamination by the proposed Bolo Station landfill, San Bernardino County, California: Consultant report from K.W. Brown Environmental Services, prepared for Cargill Salt Company, Ocober 20, 1993.

S-20

TABLE 1
SUMMARY OF DEFICIENCIES IN DRAFT EIR/EIS SUPPLEMENT
(Page 1 of 4)

SECTION OF DRAFT EIR/EIS SUPPLEMENT	SECTION OF THIS REPORT	DEFICIENCY NOTED
3.3.2.3	2.1	Alternative Locale I was improperly eliminated in the site-selection process, due to incorrect land-use information.
3.3.2.2	2.2	Alternative Locale G was improperly eliminated from the site-selection process due to inaccurate geologic information.
4.1.1	3.1	Descriptions of soils and stratigraphy in the Supplement do not include recent Rail•Cycle data that conflict with the interpretations presented.
4.1.2	3.2	The investigations of faults at the site are incomplete and inadequate to demonstrate that no active faults are present at the proposed landfill; geologists with the State Water Resources Control Board have recognized this deficiency and recommended additional detailed exploration.
not addressed	3.3	There have been no investigations of ground fissures that represent a potential hazard to the proposed landfill.
4.1.2.3.4	3.4	Lineament A, a prominent geologic feature projecting toward the site, has not been investigated completely, although additional work was recommended by Rail•Cycle's consultant.

S-20

TABLE 1
SUMMARY OF DEFICIENCIES IN DRAFT EIR/EIS SUPPLEMENT
(Page 2 of 4)

SECTION OF DRAFT EIR/EIS SUPPLEMENT	SECTION OF THIS REPORT	DEFICIENCY NOTED
4.1.2.4	3.5	The investigation of buried channels found evidence o possible sand-filled channels that could be preferential flow paths but these were not investigated further.
4.2.3	3.6	Additional discussions of soil consolidation are presented in the Supplement but the technical basis for these discussions is uncertain; the evaluations o soil consolidation do not appear to have adequately considered the very low-density soils under the part of the site near the brine wells.
4.2.2	3.7	The additional descriptions of ground-water conditions in the Supplement do not include data from recent exploration and testing (by consultants to Rail•Cycle) that conflict with the interpretations presented.
4.3.2	3.8.1	The additional descriptions of on-site mineral resources in the Supplement are based on theories that have been proved incorrect in recent tests by consultants to Rail•Cycle.
4.3.3	3.8.2	The descriptions of conditions affecting brine production at the Cargill wells are based on incorrect assumptions and incomplete information.
5.1.1.1	4.1	Potential impacts to the proposed landfill from possible active faults cannot be evaluated because th investigations of faulting are incomplete.

S-20

TABLE 1
SUMMARY OF DEFICIENCIES IN DRAFT EIR/EIS SUPPLEMENT
(Page 3 of 4)

SECTION OF DRAFT EIR/EIS SUPPLEMENT	SECTION OF THIS REPORT	DEFICIENCY NOTED
not addressed	4.2	Potential impacts to the proposed landfill from existing and possible future ground fissures have not been evaluated.
5.1.1.1.2	4.3	The evaluation of potential impacts from buried channels is incomplete; possible sand-filled channels have not been addressed.
5.1.1.2	4.4	The evaluation of potential impacts from soil consolidation under the landfill are based on analyses that do not appear to have adequately considered conditions in the part of the site near the brine wells.
5.1.1.2.3	4.4	The evaluation of potential impacts from differential soil consolidation are inconsistent with data from Rail•Cycle's drilling programs.
5.2.1.2.2	4.5.1	The evaluations of potential for contaminants to migrate through the ground water are based on incorrect and inaccurate descriptions of ground-water conditions at the site.
5.2.1.2.2	4.5.2	The evaluations of potential for the landfill to contaminate the ground water assume that releases would be detected by the unsaturated zone monitoring system; the proposed system uses an unproved approach and there is no assurance that it will be effective.

TABLE 1
SUMMARY OF DEFICIENCIES IN DRAFT EIR/EIS SUPPLEMENT
(Page 4 of 4)

SECTION OF DRAFT EIR/EIS SUPPLEMENT	SECTION OF THIS REPORT	DEFICIENCY NOTED
5.2.1.2.2	4.5.3	The evaluations of potential for the landfill to contaminate the ground water assume that releases would be detected by the proposed ground-water monitoring system; this system was designed from incomplete site characterization and does not comply with applicable State and EPA standards (as noted in reviews by the State and the EPA).
5.2.1.2.2 and 5.3.2.2	4.5.4	Undetected leaks from the landfill would contaminate the adjacent Cargill brine wells.
5.2.1.2.2 and 5.3.1	4.5.4 and 4.6	If leaks from the landfill are detected, the corrective actions that could be implemented would impact production from the brine wells.
5.3.1 and 5.3.2	4.6	The evaluation of potential impacts on brine production is based on inaccurate descriptions of conditions at the brine wells and incomplete information on brine flow.

S-20

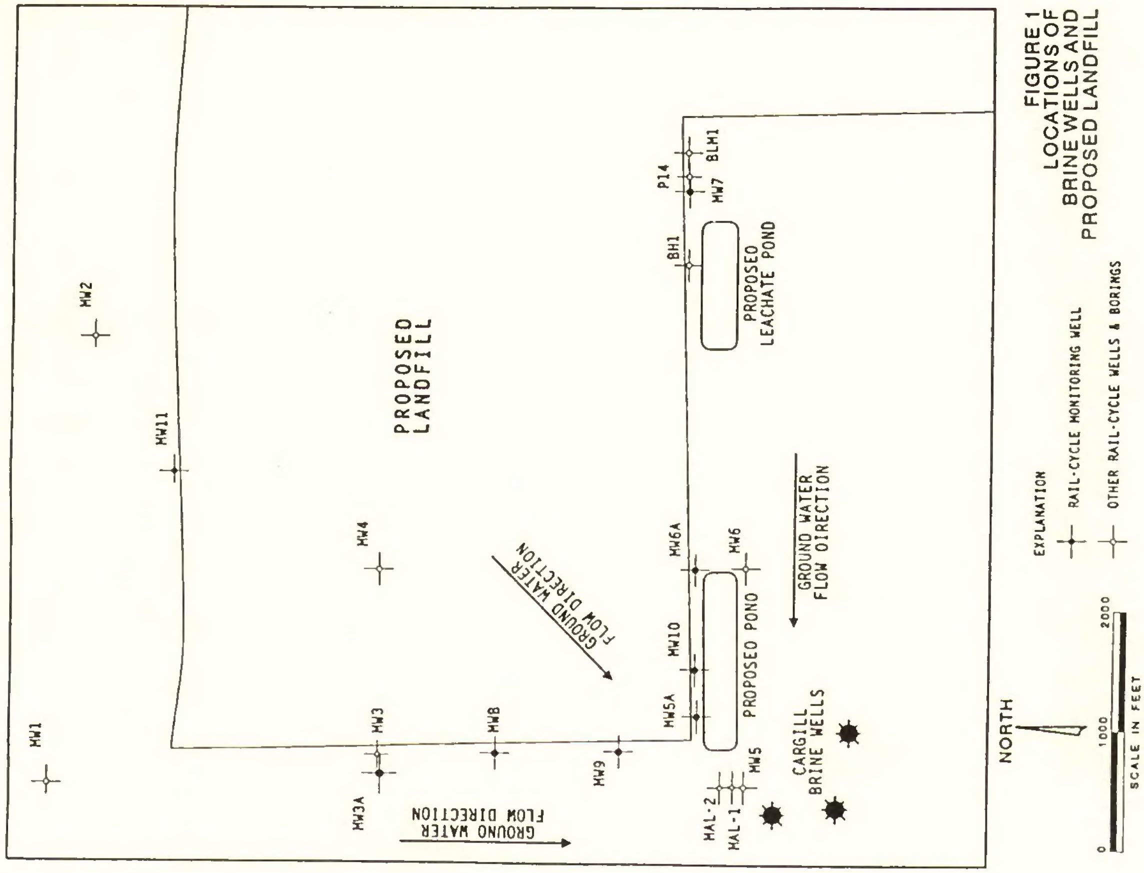


FIGURE 1
LOCATIONS OF
BRINE WELLS AND
PROPOSED LANDFILL

S-20

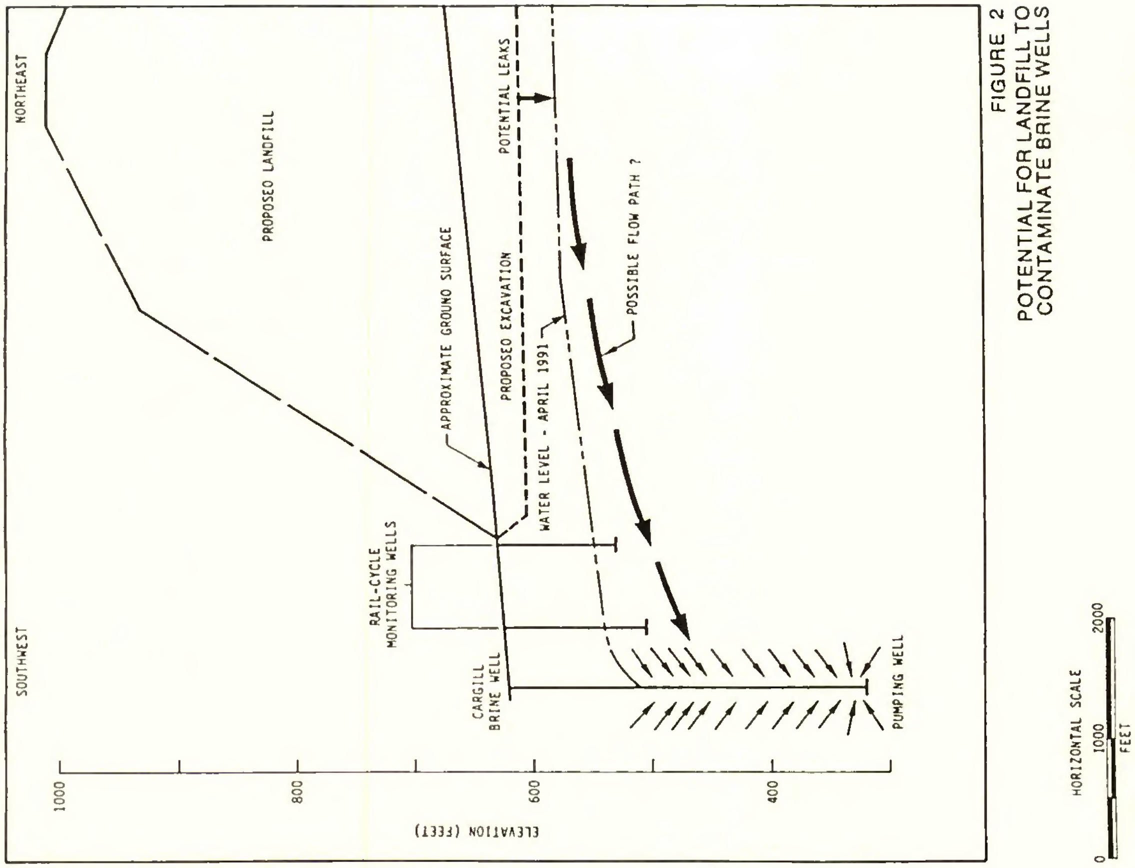
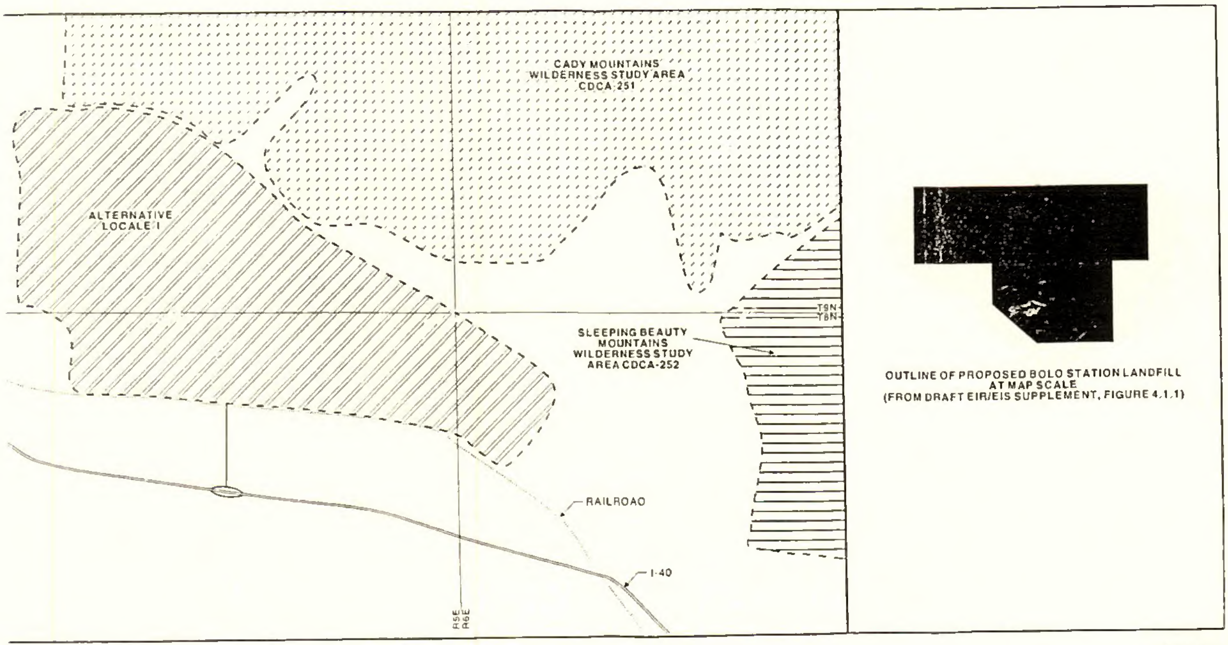


FIGURE 2
POTENTIAL FOR LANDFILL TO
CONTAMINATE BRINE WELLS

S-20


CADY MOUNTAINS WILDERNESS STUDY AREA CDCA-251
ALTERNATIVE LOCALE I
SLEEPING BEAUTY MOUNTAINS WILDERNESS STUDY AREA CDCA-252
T9N
T8N
R5E
R6E
RAILROAO
I-40
OUTLINE OF PROPOSED BOLO STATION LANDFILL AT MAP SCALE (FROM DRAFT EIR/EIS SUPPLEMENT, FIGURE 4.1.1)
NORTH
0
1
2
SCALE IN MILES

LTERNATATIVE LOCALE I FROM DRAFT EIR/EIS
UPPLEMENT FIGURE 3-6.
WILOERNESS STUDY AREAS FROM BLM WILDERNESS
STATUS MAP, JANUARY 1993 AND WILDERNESS STUDY
REA MAP-79, AUGUST 1991.

FIGURE 3
RAIL-CYCLE LANDFILL SITING
ALTERNATIVE LOCALE I

S-20

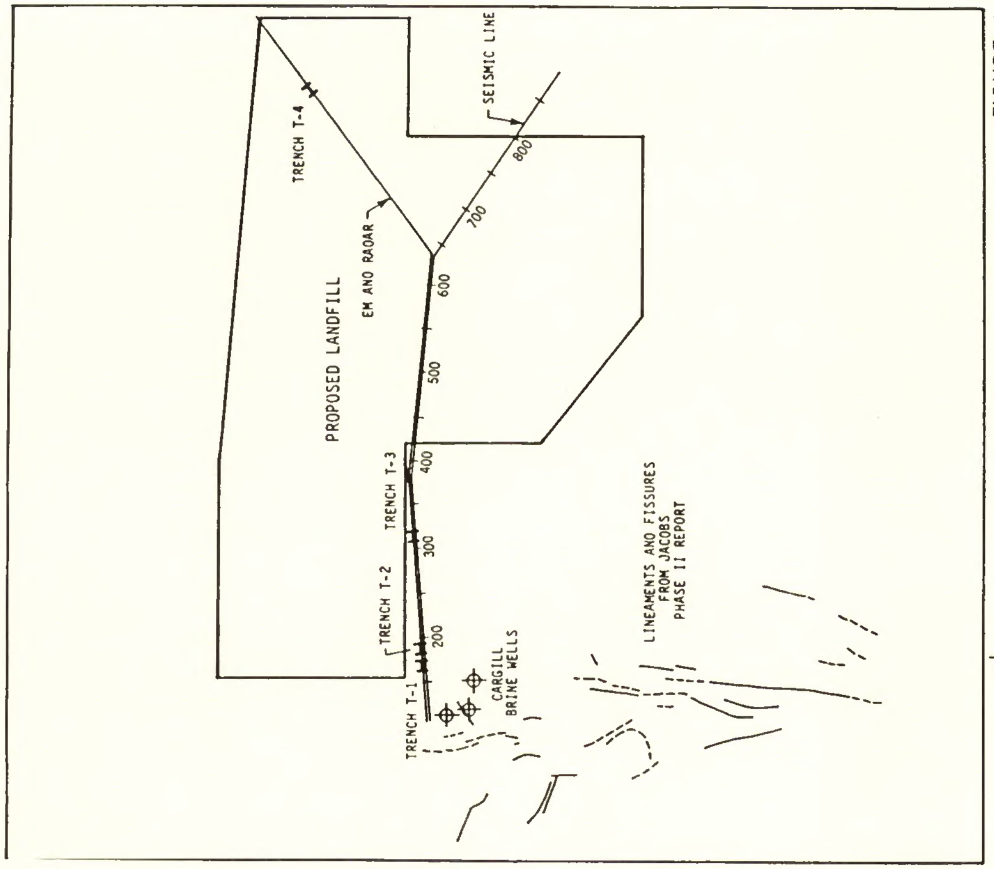
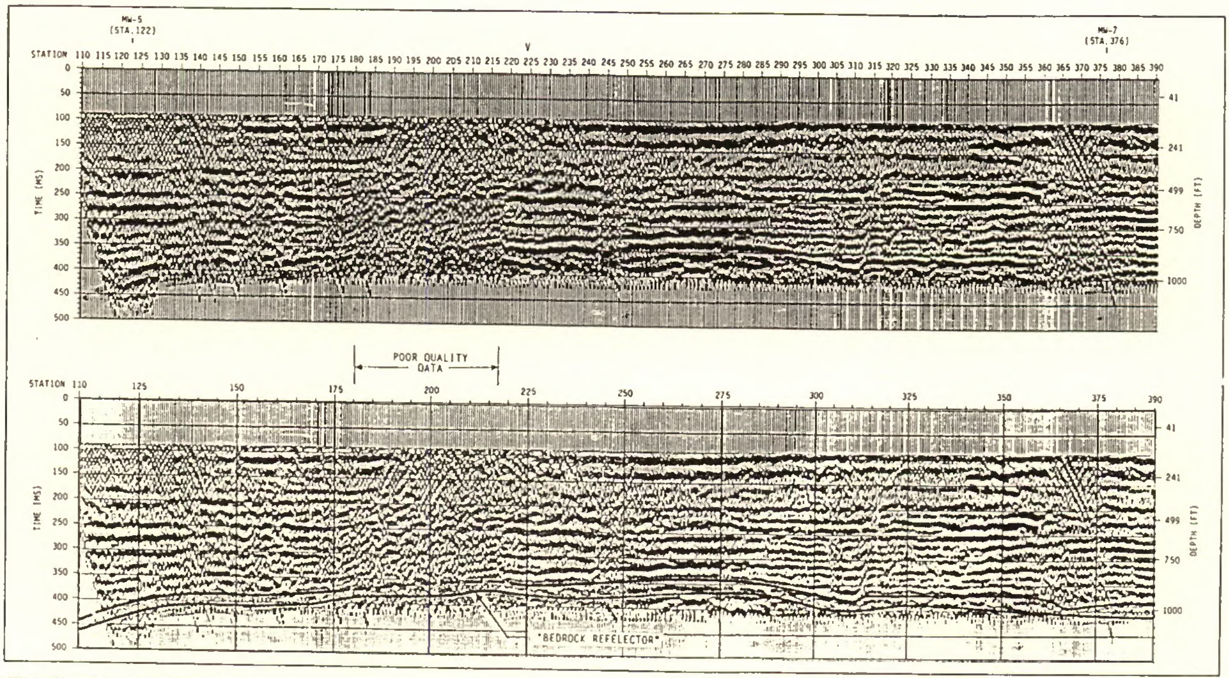


FIGURE 4
LOCATIONS OF GEOPHYSICAL LINES, TRENCHES, FISSURES, AND LINEAMENTS

REFERENCE: JACOBS ENGINEERING GROUP
PHASE II REPORT, DECEMBER 1991, PLATE 4-1
DRAFT EIR/EIS SUPPLEMENT, FIGURE 4.1.1

S-20



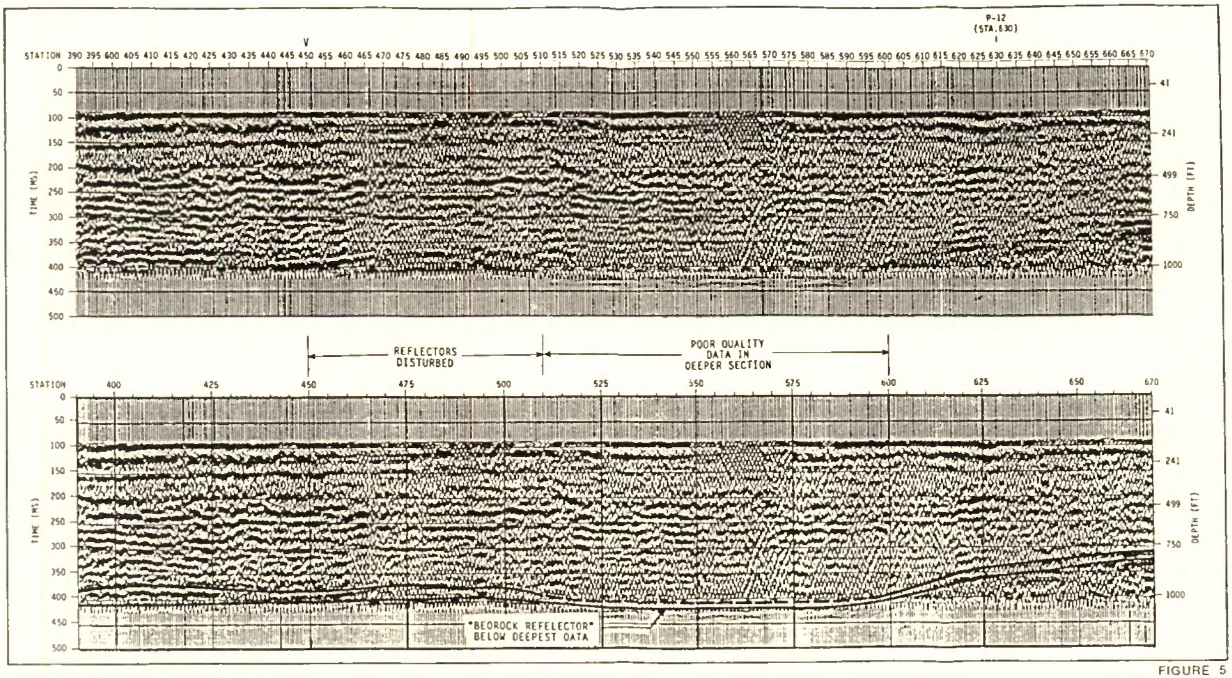
UPPER FIGURE IS COPY OF SEISMIC REFLECTION RECORD FROM JACOBS ENGINEERING, PLATE 3.
LOWER FIGURE IS "BEDROCK REFLECTOR" INTERRRETED BY JACOBS.

REFERENCE: JACOBS ENGINEERING GROUP
GEOPHYSICAL SURVEY REPORT, DECEMBER 1992

FIGURE 5
(PAGE 1 OF 3)

SEISMIC REFLECTION RECORD
WITH RAIL-CYCLE INTERPRETATION

S-20



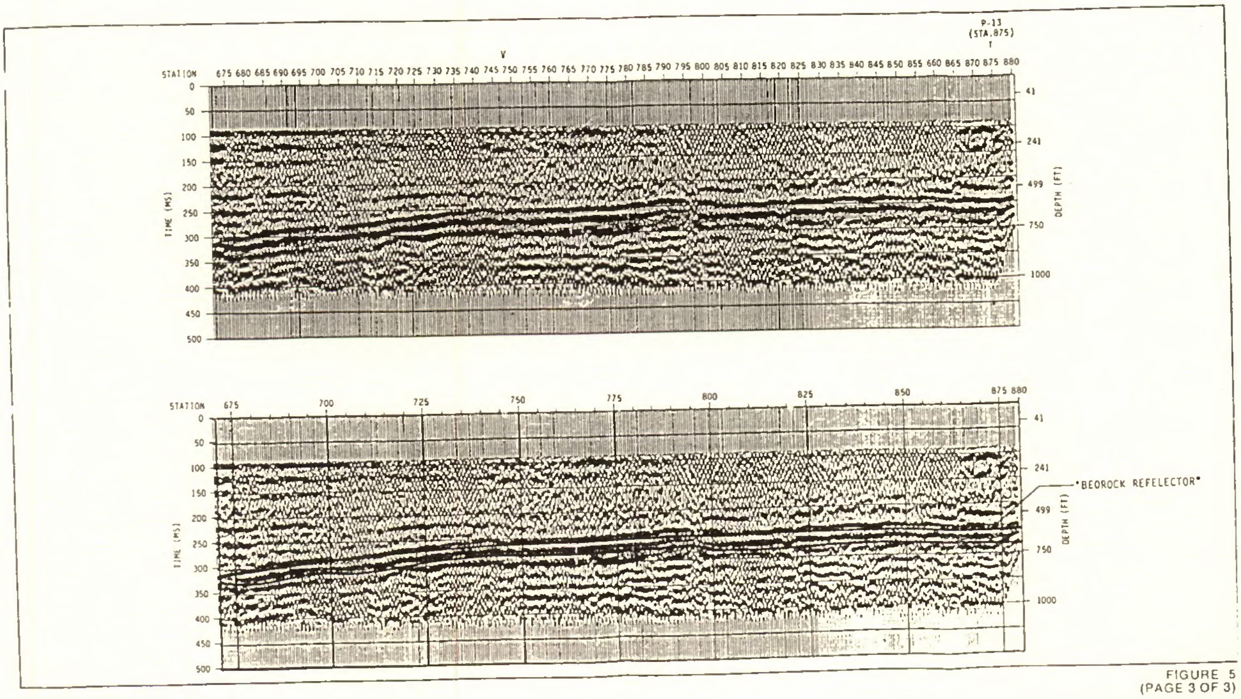
UPPER FIGURE IS COPY OF SEISMIC REFLECTION
RECORD FROM JACOBS ENGINEERING, PLATE 3.
LOWER FIGURE IS "BEDROCK REFLECTOR" INTERPRETED
BY JACOBS.

REFERENCE JACOBS ENGINEERING GROUP
GEOPHYSICAL SURVEY REPORT, DECEMBER 1992

FIGURE 5
(PAGE 2 OF 3)

SEISMIC REFLECTION RECORD
WITH RAIL-CYCLE INTERPRETATION

S-20



UPPER FIGURE IS COPY OF SEISMIC REFLECTION
RECORD FROM JACOBS ENGINEERING, PLATE 3.
LOWER FIGURE IS 'BEDROCK REFLECTOR' INTERPRETED
BY JACOBS

REFERENCE: JACOBS ENGINEERING GROUP
GEOPHYSICAL SURVEY REPORT, DECEMBER 1992

FIGURE 5
(PAGE 3 OF 3)

SEISMIC REFLECTION RECORD
WITH RAIL-CYCLE INTERPRETATION

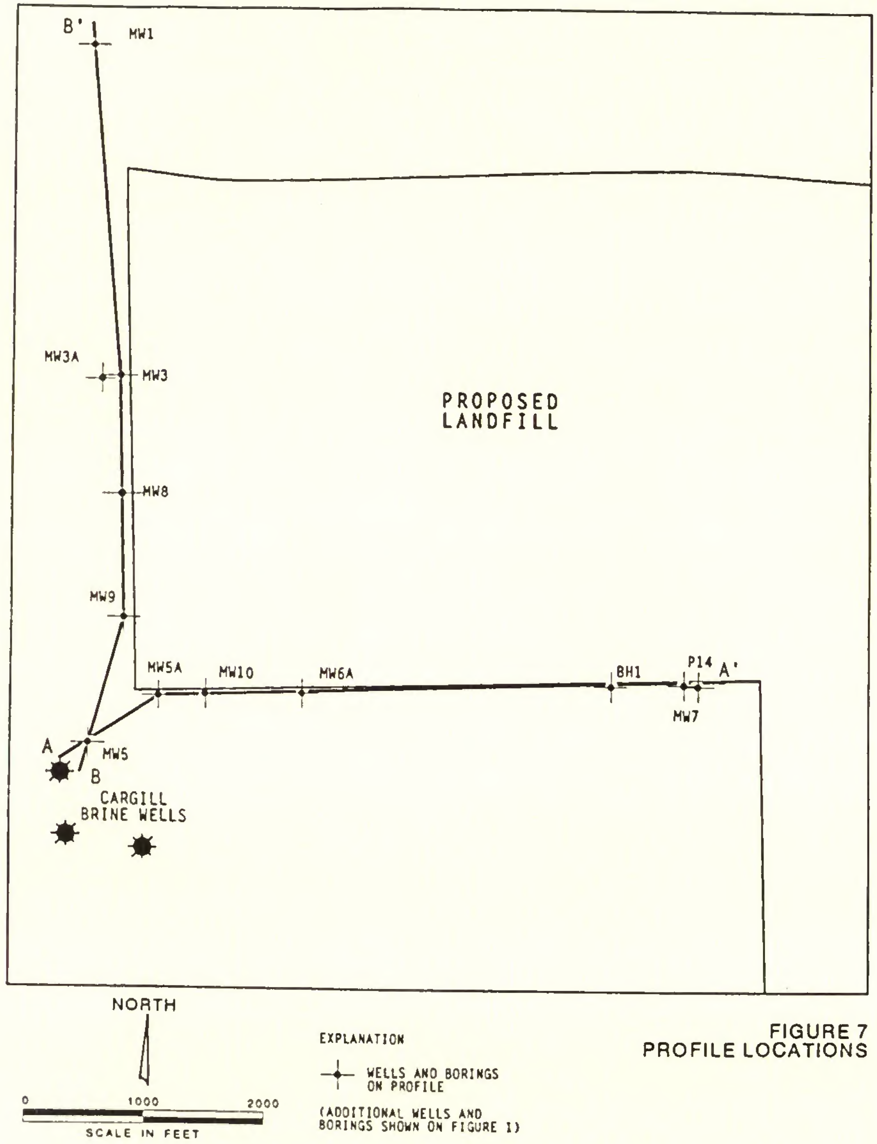
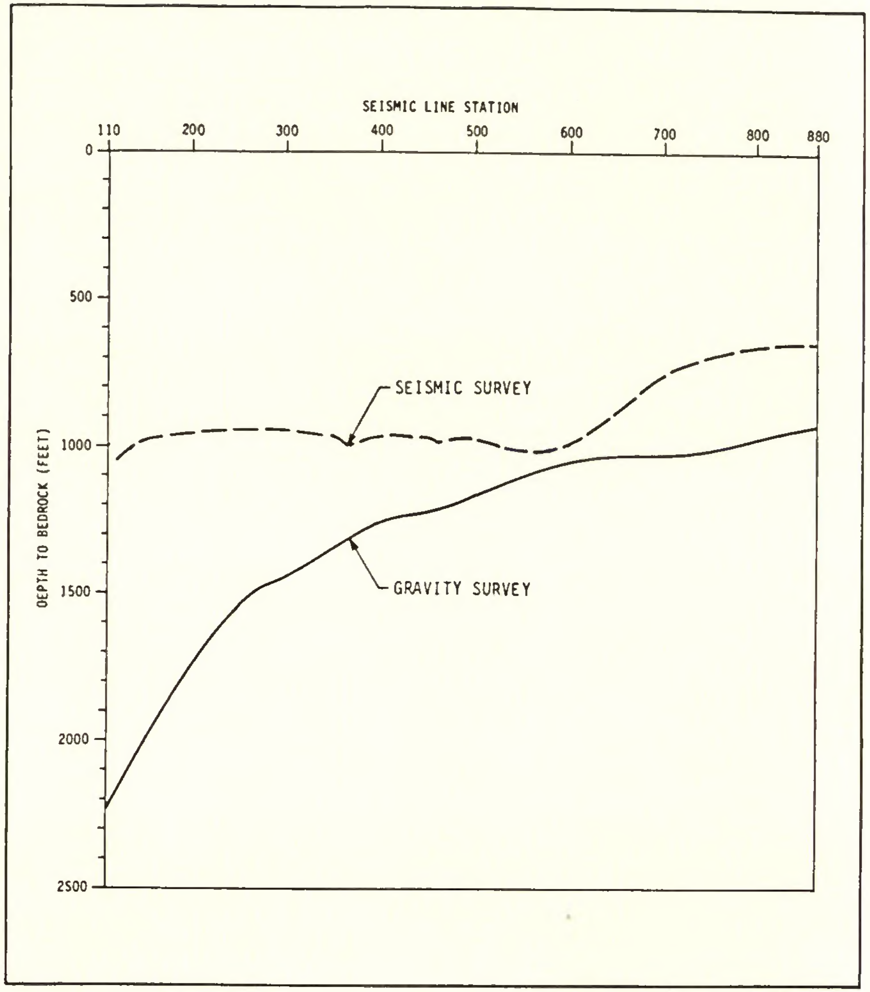


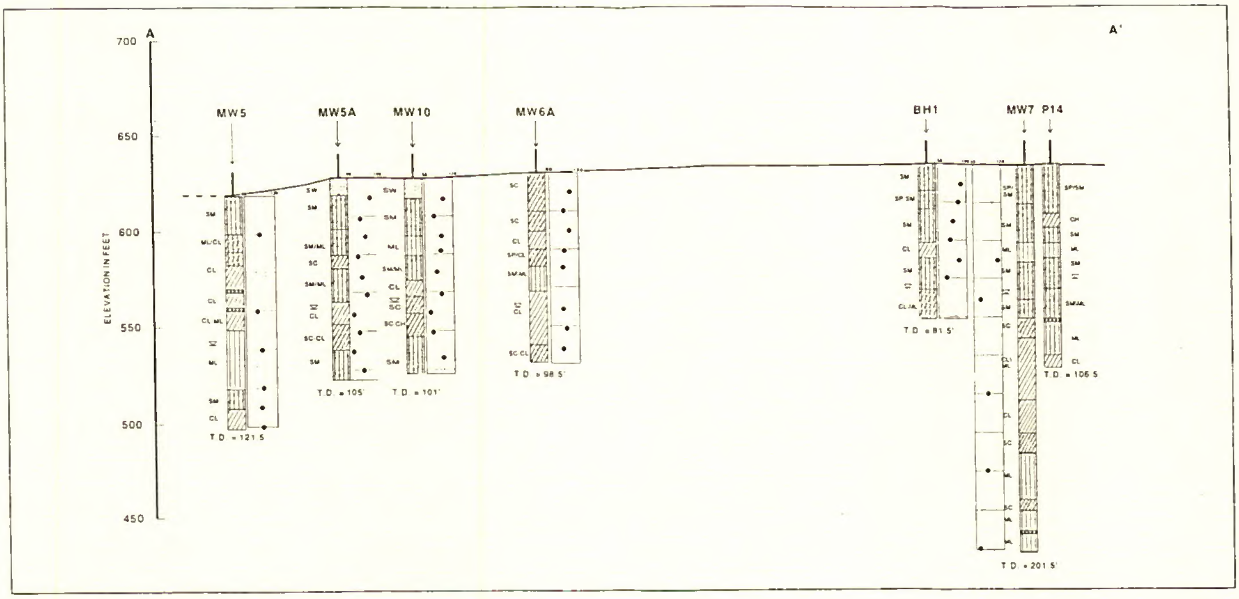
FIGURE 7
PROFILE LOCATIONS



DATA FROM:
DRAFT EIR/EIS REPORT, FIGURE 3-12
JACOBS ENGINEERING GROUP
GEOPHYSICAL SURVEY REPORT,
DECEMBER 1992

FIGURE 6
COMPARISON OF SEISMIC
AND GRAVITY PROFILES

S-20



SEE FIGURE 7 FOR BORING LOCATIONS.

LOGS OF BORINGS MW5, MW7, AND P14 FROM JACOBS ENGINEERING PHASE II REPORT, DECEMBER 1991.

LOGS OF BORINGS MW5A, MW10, AND MW6A FROM JACOBS ENGINEERING MONITORING WELL INSTALLATION REPORT, DECEMBER 1992.

LOG OF BORING BH1 FROM JACOBS ENGINEERING FIELD EXPLORATION REPORT, MARCH 1993.

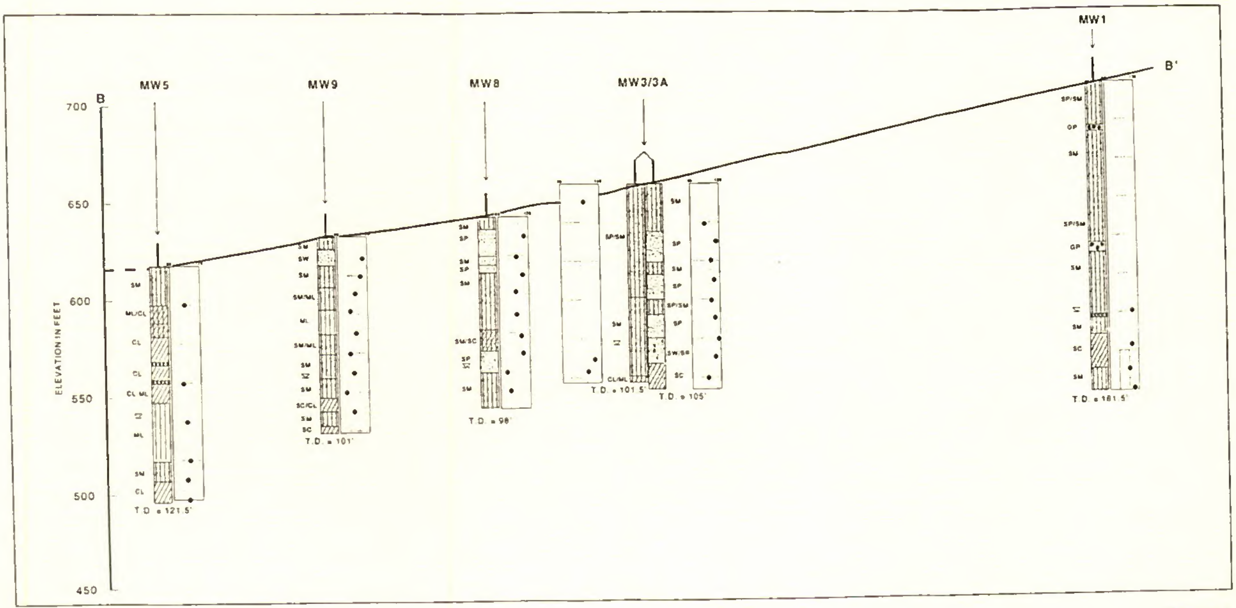
0 500 1000
HORIZONTAL SCALE IN FEET

▽ WATER LEVEL DURING DRILLING

FIGURE 8

PROFILE A-A'

S-20



SEE FIGURE 7 FOR BORING LOCATIONS.

LOGS OF BORINGS MW5, MW3, AND MW1 FROM JACOBS ENGINEERING PHASE II REPORT, DECEMBER 1991.

LOGS OF BORINGS MW3A, MW8 AND MW9 FROM JACOBS ENGINEERING MONITORING WELL INSTALLATION REPORT, DECEMBER 1992.

0 500 1000
HORIZONTAL SCALE IN FEET

▽ WATER LEVEL DURING DRILLING

● DRY DENSITY OF SOIL SAMPLES (PCF)

FIGURE 9

PROFILE B-B'

DOCUMENT S-20
MORRIS A. BALDERMAN
RESPONSE TO COMMENTS

Response S-20-1

1. Based on further review, it is agreed that Alternative Locale I is proximate to the Cady Mountains Wilderness Study Area (WSA-251), but is not located within the boundary of this WSA. The remaining reasons for excluding Locale I as an alternative, as discussed in Section 3.7.2.2 of the Draft EIR/EIS, remain valid. In contrast to the Bolo Station and Cadiz Alternative sites, ATSF does not own any of the property within the boundary of Locale I. The potential for Rail•Cycle to acquire the site was not investigated because it did not meet the other alternative selection criteria of direct highway access to the site.

2. As noted in this comment, Locale I is closer to Los Angeles and would result in a reduction in the rail-haul distance. However, secondary access is not available to the locale. Although existing road access to Hector is provided from I-40, no access is available to the balance of the locale. Construction of at least 1-1/2 miles of road would be required for initial site construction, landfill development phasing, operations, and employee access. Although the impacts associated with construction and use of an access road were not quantified, impacts associated with development of the access road (i.e., air quality, traffic, biological resource, cultural resource, etc.) would be impacts which would not occur at the proposed site or Cadiz Alternative site at which access is available. As it was determined that this alternative would not avoid significant, unavoidable adverse impacts associated with the proposed action, and because additional impacts would occur because of the requirement to construct an access road to this locale, the alternative did not merit further evaluation.

Response S-20-2

1. This comment is correct in that Alternative Locale G is underlain by alluvium. However, as described in Section 3.3 of the Supplement, lava beds (i.e., basalt flows) are mapped directly south of the site's boundary. This geologic feature defined the original southern boundary for this alternative locale, and is the reason for limited configurations for landfill development.

2. Another major geologic constraint to development of a landfill at Locale G is the Ludlow Fault which traverses the western boundary of the locale. As specified in Appendix E of this Final EIR/EIS, this fault has been classified as potentially active.

3. In summary, Locale G was excluded from further consideration based on both the geologic conditions and the fact that Rail•Cycle does not own property within this locale.

Response S-20-3

1. A report titled, *Hydrogeologic Evaluation of the Bolo Station Landfill Site, San Bernardino County, California* was prepared to document the studies and field investigations conducted by P.E. LaMoreaux & Associates, Inc. (PELA, 1994). The PELA investigation consisted of the boring and installation of two additional ground water wells (designated as HAL-1 and HAL-2) in the southwest corner of the proposed site.

2. The PELA report becomes a part of the technical references for the EIR/EIS and is available for public review at the San Bernardino County Planning Department and the BLM Desert District Office in Riverside. Although the PELA report includes some refined data, it does not alter the findings and conclusions of the Draft EIR/EIS and Supplement, or the design standards used by Rail•Cycle.

3. The Supplement (see Section 5.2) concluded that there is a single water bearing zone beneath the site, the lower extent of which is approximately 290 feet below the ground surface at the southern boundary of the proposed landfill site. Mitigation measures were provided to protect ground water and mineral resources (i.e., brine) based on this information.

4. Based on review of the PELA report, within the sphere of HAL-1 and HAL-2, a zone of soil containing an expansive clay mineral (smectite) was found to restrict vertical water movement between the upper and lower portions of the aquifer. This refined information, however, does not change the potential water quality impacts or mitigation measures described in the Draft EIR/EIS and Supplement.

5. The two wells constructed by PELA were screened between 235 feet and 355 feet, and as noted in this comment, HAL-1 produced 50 gallons per minute (gpm) over a 72-hour pumping test. However, because the well was perforated across an interval of 120 feet, no direct inference can be made as to whether significant quantities of water is available below 290 feet. If water is available below 290 feet, it would not alter the findings or

mitigation measures provided in the Draft EIR/EIS and Supplement.

Response S-20-4

1. An extensive investigation of the potential for active faults or other geologic hazards present at the Bolo Station site has been performed as documented in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, and as further reviewed for this Final EIR/EIS. A list of the geological reports and maps which have been reviewed is included as Table E.1, Appendix E of this Final EIR/EIS.

2. The information reviewed did not reveal any direct or indirect evidence of geologic hazards located in the project vicinity except for a remote possibility of a lineament (i.e., Lineament A as described in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement), located southerly of the site and a fissure (Fissure N) located in the southeast corner of the site.

3. As noted in this comment, the SWRCB geologist recommended requiring that excavations for each landfill cell be logged under direction of a Certified Engineering Geologist (SWRCB, 1993). The letter from the State's geologist also states that, "... the geophysical and trench work conducted to date appears to be adequate for the intended purpose" (i.e., issuance of the WDRs for the proposed landfill). The logging of cell excavations has been included as a mitigation measure in this Final EIR/EIS (see Table S.2) and would fill in any data gaps from the preliminary investigations. This is standard construction procedure for landfills.

4. The County Geologist has also reviewed the available information and conducted an onsite field reconnaissance with Environmental Solutions, Inc., Rail•Cycle, and Gary Rasmussen, Rail•Cycle's consulting geologist. The field reconnaissance is documented in a report prepared by Rasmussen (1994) and is included in Appendix D of this Final EIR/EIS. The review confirmed that the finding by Rasmussen concluded that Lineament A is not related to Holocene faulting.

5. To confirm the absence of faulting or other geologic hazards, the County Geologist has also recommended geologic logging of cell walls during excavation, and submittal of a geologic report prepared by a Certified Engineering Geologist to the County and the RWQCB for review and approval (see Appendix D of this Final EIR/EIS). Appropriate measures are to be recommended by Engineering Geologist and approved by the County Geologist and RWQCB should active faulting be encountered.

6. The mitigation measure as proposed by the SWRCB and the County Geologist has been included in this Final EIR/EIS and incorporated into the Mitigation Monitoring and Compliance Program.

Response S-20-5

1. As detailed in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, extensive geotechnical investigation has been conducted for the proposed action. As concluded by the SWRCB, the geophysical and trench work conducted to date is adequate for the purposes of characterizing the geological/seismic conditions at the proposed site (SWRCB, 1993). Further, the mitigation measure to conduct geologic logging of the landfill cells during excavation is standard construction procedure and would provide additional assurances that geologic hazards do not underlie the project site.

Response S-20-6

1. Geologic literature pertinent to the proposed project area has been reviewed (see Table E.1, Appendix E of this Final EIR/EIS). These geologic reports indicate that the area in which the Bolo Station site is located is at the boundary of the Mojave and Sonoran tectonic blocks. Faults in the project vicinity, including those identified through borings into Cadiz and Bristol Lake sediments, have been established to generally cut lower Pleistocene deposits while upper Pleistocene and/or Holocene deposits overlying the fault traces are not deformed. The Bristol-Granite Mountain Fault has cut upper Pleistocene deposits along the trace in the Northern Bristol Mountains 33 miles north of the project site, however, the overlying Holocene unit is not deformed.

2. As noted in Section 5.2 of the Draft EIR/EIS, the volcanic flows from Amboy Crater were qualitatively dated by Parker (1963) to be about 6,000 years old. However, thirty years later, an investigation by Miller (1993) indicated that lava flows at Amboy Crater are interbedded with much older alluvium (i.e., uppermost Pliocene to late Pleistocene age). Rosen (1989) further supports that the playa surface is an erosional feature of middle to late Pleistocene age. The latter investigations substantiates that the interbedded lava flows would be of similar age (i.e., middle to

late Pleistocene). No faults cutting these flows have been identified. The fact that the cone of the Amboy Crater is intact indicates that the flows were probably emplaced during quiet outpourings of lava (i.e., without significant eruptions and associated tectonic activity).

3. As summarized in Table E.2, Appendix E of this Final EIR/EIS, the Ludlow Fault, located approximately 15 miles from the Bolo Station site, represents the closest potentially active fault. Based on the literature reviewed, with the exception of the Ludlow Fault, deformation and volcanism ceased in the vicinity of the Bolo Station site prior to the Holocene period.

Response S-20-7

1. Based on a review of available literature, a summary table has been prepared and is included as Table E.2, Appendix E of this Final EIR/EIS. This table indicates the status of faults and potential fault zones in the site vicinity. The references reviewed to develop the table do not classify the faults to be active. Numerous reference and information sources were used in the evaluation for the Draft EIR/EIS and Supplement in addition to the CDMG report and Fault Activity Map discussed by the commenter. Figure 5.2.1 from the Draft EIR/EIS has been refined to highlight the faults in the project area. The refined figure is included in Chapter 1.0 of this Final EIR/EIS.

Response S-20-8

1. As noted in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, numerous methods, including geophysical surveys, were used to investigate the potential faulting at the Bolo Station site. The methods used by MESA, Jacobs, and others, included the following:

   - Review of published and unpublished maps and geologic references.
   - Careful review of site aerial photographs for fault related evidence.
   - Field geologic mapping and reconnaissance.
   - Geophysical surveys including gravimetric, electromagnetic, seismic refraction and reflection, and ground penetrating radar (GPR).
   - Geotechnical borings and trenches.

   The investigation process followed the CDMG guidelines for evaluating the potential hazard of surface fault rupture.

2. Orientation of the geophysical survey lines were set to obtain data from several trends of identified geotechnical concerns (i.e., north-south lineament/fissures, northwest regional faults, and north-south and/or northeast channels). The philosophy and approach to the field exploration program was agreed to in concept by representatives of the RWQCB and SWRCB (Jacobs, 1993b).

Response S-20-9

1. As discussed in the previous response, GPR was only one method used to evaluate potential faulting at the site. The primary data used to evaluate faulting were seismic refraction and reflection in combination with GPR. These results were verified through a trenching program.

2. It is correct that the Jacobs report did not document specific features observed in the field potentially associated with minor anomalies, nor did it specify which anomalies might be attributed to shallow animal burrows, alluvial channels, and/or stratigraphic changes in near surface soils (Jacobs, 1993a). This additional investigation would not have been pertinent since there was no indication that the origin of these anomalies were fault related.

3. The geophysical survey report provides the rationale for the selection of anomalies to be further investigated by field exploration (Jacobs, 1993a). The field exploration trench and boring locations selected were among the strongest GPR anomalies and generally coincided with anomalies identified on the seismic or electromagnetic/resistivity records.

Response S-20-10

1. As discussed in the previous response, the electromagnetic/resistivity surveying was used in conjunction with several other methods to investigate the potential for faulting at the site.

2. The electromagnetic/resistivity surveys rely on marked differences in electrical conductivity. As specified in this comment, these methods would not detect differences in thick sequences of similar sediments. However, sandy-gravels or gravelly-sands would present a marked electrical conductivity difference compared to surrounding finer grained silty-sands and sandy-silts or clays. Since it would be the coarser sediments that could provide preferential ground water pathways, the methodology was appropriate to evaluate the potential for buried gravel channels. Subtle

localized differences in soil type (i.e., silty-sand versus sandy-silt) would not provide significant differences in ground water flow rates continuous across the site.

Response S-20-11

1. The presence of a ground water barrier can be an indicator of faulting. The data from both the seismic refraction and ground water monitoring wells, indicate no ground water barrier exists at the site. This information along with data obtained from the various other methods as discussed in Response S-20-8, demonstrate that faulting is not evident at the site.

Response S-20-12

1. It is agreed that there are portions of the seismic record which are of poor quality and/or discontinuous. Section 4.1.2.3.2 of the Supplement did not use the term "remarkable continuity" as suggested by this comment to describe the reflector.

2. Section 4.1 of the Supplement acknowledges the difference between the seismic reflection data and the previous gravity studies. Furthermore, it is possible that bedrock lies below the 1,000 foot interval penetrated by the seismic reflector. However, even if the interpretation of the seismic reflection data west of Station 600 is incorrect, and the gravity model provides a more accurate representation of the bedrock, the assessment of potential seismic hazards and conclusions in the Draft EIR/EIS and Supplement would remain valid.

3. The data from the seismic investigations (including the seismic refraction survey, GPR, trenching and borings, as well as the literature review and consultant investigation) and unbroken water table, support the conclusion of the Draft EIR/EIS and Supplement regarding the absence of fault movement beneath the site.

Response S-20-13

1. As noted in the previous response, Section 4.1 of the Supplement acknowledged the difference between the result of the gravity survey and the seismic reflection data in the western portion of the site. It is also correct, that based on the gravity survey, an escarpment west of the proposed landfill was interpreted as a possible fault.

2. A consensus of the available information indicates the escarpment is not a fault and not an extension of the Bristol Mountain Fault. Faults in the project vicinity, including the Bristol Mountain Fault, have been established to have generally cut lower Pleistocene deposits, while upper Pleistocene and/or Holocene deposits overlying the fault traces are not deformed (i.e., the faults are not active) (see Table E.2, Appendix E of this Final EIR/EIS).

3. If the bedrock profile as represented by the gravity survey is accurate, it may be, as suggested by this comment, that the western seismic reflector interpreted as top of bedrock is a sedimentary horizon. Such an unbroken horizon would indicate that any deformation of lower deposits had ceased prior to the deposit of the horizontal deposits. The evidence of the upper horizon which is likely Pleistocene, would provide additional support that active faulting does not occur at the site.

Response S-20-14

1. Dr. Rockwell was one of numerous geologic consultants which worked on the proposed project, and as outlined in his report, his involvement was limited to several days. Neither the Jacobs report referenced in this comment, nor the Supplement, rely on the Rockwell report for conclusions regarding the presence of faulting in the project site vicinity. The primary reports reviewed to support Jacobs field effort are listed in Section 2.1 of their report (Jacobs, 1993a). As described in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, lineaments and fissures within the project vicinity are well documented in various reports and maps.

Response S-20-15

1. As noted in this comment, it is agreed that the site and adjacent terrain are not within a pediment. The presence of well developed desert pavement was not established by the trenching program (Jacobs, 1993a).

Response S-20-16

1. The available data does not indicate a well-developed soil profile in the order of 100,000 years old. Approximate age dating was performed by soil-stratigraphers through evaluation of the physical and chemical characteristics of soils and site geomorphology (Jacobs, 1993a). Additionally, the exposed soils were correlated with dated soil deposits from other sites with similar geologic and climatic settings. The soils

exposed in Trenches 1, 2, and 3 were assigned a late Pleistocene age of 11,000 to 35,000 years before present (Jacobs, 1993a). This age assignment applies to soils beneath the upper 1 to 3 feet of windblown sand.

Response S-20-17

1. Trench locations were determined by comparison of seismic data, shallow electromagnetic/resistivity data, and GPR data. However, as noted in this comment, since the GPR data profiled the upper several feet of sediment (area of concern for near surface Holocene faults), the GPR anomalies ultimately indicated the location of the trenches. As described in Response S-20-9, the GPR anomalies generally coincided with anomalies identified on the seismic or electromagnetic/resistivity records.

2. As referenced in this comment, the SWRCB State geologist has concluded that: ". . . there are still a substantial number of additional geophysical anomalies which have not been checked by detailed logging of trenches" (SWRCB, 1993). This SWRCB letter also states the following:

   > "Nevertheless, the site grading plan calls for excavation of 50 feet or more of the in-place soil in all waste deposition areas. Careful logging of the sides of these excavations should reveal the existence of any Holocene faulting that might exist at the Bolo Station site".

3. As discussed in Response S-20-4, the County Geologist reviewed these findings and has recommended geologic logging of cell walls during excavation. This mitigation measure has been included in the Final EIR/EIS (see Table S.2) and incorporated into the Mitigation Monitoring and Compliance Program.

Response S-20-18

1. There are several possible origins of fissures. Based on site reconnaissance, it has been determined that these features are likely related to subsidence due to ground water level lowering caused by climatic and environmental changes through geologic time, local ground water withdrawal, or geotechnical conditions other than faulting (Rasmussen, 1994). The majority of the primary fissures also trend away from the site (to the northwest) beginning about one-half mile south of the site.

2. As required by the SWRCB and County, the logging of landfill cell excavations would provide assurances that the fissures do not extend into the site. This logging would provide data beyond the precision of geophysical surveying to enable refined assessment of geological discontinuities, if any, and allow landfill design modifications, if necessary. Design refinements as the result of geotechnical evaluation during construction are standard during landfill development.

Response S-20-19

1. The potential significance of Lineament A, as noted in this comment, has been recognized in Section 5.2 of the Draft EIR/EIS and Section 5.1 of the Supplement. The potential that this lineament is fault-related is important as it could impact the proposed landfill, if it is fault-related and were to propagate towards the site.

2. The information obtained from the geophysical surveys, field reconnaissance, trenching, and review of aerial photographs, as documented in Section 4.1 of the Supplement, support the lack of continuity of Lineament A beneath the site. This conclusion was further supported by the presence of continuous, unbroken later Pleistocene beds within Trenches 1 and 2 (Jacobs, 1993a).

3. Based on subsequent review of Lineament A conducted by Rasmussen for this Final EIR/EIS, it is no longer believed that the lineament is a lakeside feature (Rasmussen, 1994). Rasmussen reviews several possible origins of lineaments, and concluded that Lineament A is related to subsidence of the area west of the lineament, most likely due to ground water lowering caused by climatic and environmental changes through geologic time (Rasmussen, 1994). The Rasmussen report cites numerous evidence for Lineament A not being an active fault, concluding that the feature is not an active fault, and, in fact, is not likely a tectonic fault.

Response S-20-20

1. The presence of a ground water barrier can be an indicator of faulting. The absence of a ground water barrier along with data obtained from the various methods as described in Response S-20-8, demonstrate that faulting is not evident at the site.

Response S-20-21

1. As discussed in Response S-20-12, even if the interpretation of the seismic reflection data is incorrect, the overall information obtained from

the complete seismic investigation supports the conclusion that Lineament A does not continue under the proposed Bolo Station site. Also, as discussed in Response S-20-18, the mitigation measure for geologic logging of cell excavations would reveal geologic discontinuities, such as an extension of Lineament A, at the proposed site. If geologic discontinuities extend beneath the site, appropriate design refinements would be incorporated in the construction of the landfill.

Response S-20-22

1. The results of the trenching in conjunction with other information from the seismic investigations support the conclusion that Lineament A does not continue beneath the site. It is correct, however, that the trenching may not conclusively demonstrate that this feature does not extend to the proposed site. As recommended by the SWRCB and County Geologist, logging of cell excavations would provide the necessary data to confirm the absence of this feature beneath the site.

Response S-20-23

1. As discussed in Response S-20-14, Dr. Rockwell's involvement in the proposed project was limited, and the Supplement did not rely on his findings to reach conclusions regarding the presence of faulting in the Bolo Station site vicinity. An overview of literature regarding the vicinity faults was conducted for this Final EIR/EIS and is summarized in Table E.2, Appendix E. As shown in the table, the faults, as referenced in this comment, have been established to represent pre-Holocene faulting. Therefore, even if Lineament A was along a projection of these features, it is not related to an active fault.

Response S-20-24

1. As summarized in Response S-20-19, it has been concluded that Lineament A is related to subsidence of the area west of the lineament (Rasmussen, 1994). The evidence also indicates that the differential settlement in the vicinity occurred in pre-Holocene time. The information does not indicate that future differential settlement could occur at the site and potentially jeopardize the integrity of the landfill liner system.

Response S-20-25

1. The comments by WMNA on the Draft EIR for the expansion of CLC's agricultural operation and the Draft EIS/EIR for the Eagle Mountain Landfill do not represent the opinions of the lead agencies for the Rail•Cycle project (San Bernardino County and BLM). Pursuant to the CEQA/NEPA processes, and subsequent regulatory permitting, each project is evaluated on its individual merits. The County and BLM have determined that the geologic/seismic investigations conducted for the EIR/EIS for the Bolo Station Landfill are sufficient for the purpose of CEQA and NEPA.

2. The geologic surveying and exploration program conducted at the Bolo Station site was agreed to in concept by the RWQCB and SWRCB (Jacobs, 1993a). As acknowledged in Response S-20-22, although the results from Trenches 1 and 2 may not conclusively demonstrate that Lineament A does not extend into the site, the results of the seismic investigation along with the information from the required logging of landfill cell excavations will provide the assurances that Lineament A does not extend on to the site or represent an active fault.

Response S-20-26

1. As noted in this comment, sand-filled channels could provide preferential ground water pathways at the site. The sands, however, would need to be clean, coarse, angular sands to result in significant pathways.

2. The referenced statement in Section 4.1.2.4.5 of the Supplement is directly quoted from Jacobs (1993a) and is not inconsistent with their findings. The statement is as follows: "The anomalies were found to be associated with fine- to coarse-sand deposits generally located above the ground water table." As shown on the boring logs, Appendix A of the Jacobs report, the sand deposits located below the water table were limited and were comprised of fine sands or contained 20- to 30-percent silt or clay.

3. The geophysical survey lines were determined sufficient to locate significant, preferential pathways (i.e., buried gravel channels). The probability of continuous, highly permeable channels below the ground water table is considered to be low.

4. Even if located, the presence of sand channels below the ground water table would not represent a significant pathway for potential releases from the landfill. Such a release would be captured and removed by the proposed UZM layer (i.e., a 4-inch permeable layer) of the double-composite liner instead of migrating to a lower sand pathway. This will occur because the horizontal permeability of the UZM layer would be

substantially greater than vertical permeability below the UZM layer).

Response S-20-27

1. The information on soil consolidation as documented in Jacobs Project Note 94 is based on additional field investigation, soil sampling and laboratory analyses. Although not published in the technical note, the laboratory results are available for public review.

2. As stated in the Supplement, the subsequent information from the 500-foot boring confirmed that the earlier analysis was conservative. The timing of these events and conclusions in the reports, are not contradictory as suggested in this comment.

3. As discussed in Section 5.1 of the Supplement, the results of the Jacobs 1991 field and laboratory soils analysis were used to determine maximum site settlement. These laboratory results provide a conservative design basis for the landfill and are well documented in the 1991 report (Jacobs, 1991b).

Response S-20-28

1. Dry density of soils is an indirect parameter for estimating consolidation potential. A direct measure is to perform laboratory consolidation tests on actual samples and use these results to estimate settlement under expected loading. This latter approach was used by Jacobs to establish the consolidation factors for design of the proposed landfill (Jacobs, 1991b).

Response S-20-29

1. A value of 85 pounds per cubic foot (pcf) for dry density was selected by Jacobs for cohesive soils below the water table based on the statistical average of the sample measurements. Although some samples have lower dry densities, there is no well defined pattern to the location/depth of these lower values.

2. The southwest portion of the landfill (i.e., Cell No. 1) was evaluated as the area of maximum predicted settlement within the landfill footprint. The predicted settlement, calculated using conservative assumptions, has been shown not to present a problem to stability or liner elements (Jacobs, 1993b).

Response S-20-30

1. The area of the landfill footprint to which this comment refers is the southwest corner of the site. This portion of the landfill would have minimal excavation and waste fill thickness. The depth of influence of landfill loading would be well within the 100 to 120 foot depths of exploratory borings. Any surface loading is distributed with depth such that stresses approach zero below a certain depth. This depth depends on the load and the soil types.

Response S-20-31

1. As noted in Response S-20-3, the results of the PELA field investigations have been documented in a report which is available for public review (PELA, 1994). The information obtained from drilling HAL-1 and HAL-2 refines the description of ground water conditions as described in the Draft EIR/EIS and Supplement, but does not alter the conclusions regarding potential ground water impacts or mitigation measures.

2. It is correct that the Supplement concluded that there is a single water-bearing zone with no significant vertical gradients. As described in Response S-20-3, the PELA wells were drilled to 355 feet and screened over a 120 foot interval (between 235 feet and 355 feet). Therefore, it cannot be inferred that significant ground water is available below 290 feet. Although the PELA report shows a possible separation between the shallow and deeper water bearing zones, the assumption used for the Draft EIR/EIS and Supplement of a single aquifer with possible vertical migration of water, as used in the analysis of potential impacts to mineral resources, is conservative.

3. Section 5.2 of the Supplement summarized a number of technical reports which provided data to support the absence of significant vertical gradients across the site. Nevertheless, the ground water modeling conducted to estimate potential impacts in the event of a release assumed a vertical gradient within the Cargill production wells radius-of-influence (Rust, 1993c). A vertical downward gradient of 0.005 feet/feet (equal to the existing horizontal gradient across the site), was incorporated into the modeling. The conservative analysis, therefore, takes into account the possibility of a vertical gradient as suggested by this comment.

4. The controlling factor for the movement of a potential release, as calculated in Section 5.2.1.2.2 of the Supplement and support technical reports, would be the horizontal rate of

movement. As discussed in the Supplement, it would take ground water over 10 years to reach from the southwest corner of the landfill footprint to the Cargill wells. This rate is conservative based on the average horizontal conductivity across the proposed site of 11.5 feet per day. For the more fine-grained soils in the southwest corner of the proposed landfill with a horizontal ground water movement rate of 70 feet per year (i.e., 0.19 feet per day), the travel time would be much greater. Vertical gradients logically steepen as ground water approaches the Cargill wells.

Response S-20-32

1. The recent testing by PELA provided refined information regarding mineral resources (PELA, 1994). The data from the PELA wells are for a location approximately one-mile west of BLM-1 and different methodologies were utilized by PELA. HAL-1 was cored continuously and BLM-1 was cored at selected intervals. Water samples for laboratory analysis were collected from HAL-1, while no water samples were obtained from BLM-1. The interpretations and theories set forth by Rust based on conditions encountered at BLM-1 do not conflict with the information from the PELA wells.

2. As noted in this comment, HAL-1 produced concentrated brine with salinity exceeding 100,000 ppm (PELA, 1994). Although this data could be used to refine salinity estimates of the aquifer at this location, information was not obtained from discrete intervals and precise locations of resource depths could not be determined. As described in Response S-20-3, the information obtained from the HAL-1 and HAL-2 wells does not alter the impact evaluation or mitigation measures recommended in the Draft EIR/EIS or Supplement.

Response S-20-33 and S-20-34

1. The reference in the Supplement regarding the soils in which the Cargill wells are drawing from, should have been Rust, *Bolo Station Landfill Summary Report of Potential Groundwater Impact and Ground Settlement Issues* (1993c). This reference cited in this comment states: "Most of the Cargill basin production is derived from the relatively incompressible, coarser-grained interbeds within the transition zone which are largely unaffected by ground settlement . . ." The report goes on to state: "The average hydraulic conductivity of the Cargill production zones (i.e., the coarser-grained interbedded sands) is about 4 x 10^{-3} cm/sec according to the Jacobs Phase II study (1991b)..." This conclusion was inferred from geomorphologic interpretations and the assumption that high yield in the Cargill wells is likely not from sandy-clays and clays, but rather from more permeable sand layers or lenses in the screened interval. A similar conclusion was apparently reached by Cargill's consultant, GSI, when their expert expressed the opinion: "... that flow to the Cargill wells is largely in very thin laminations of sandier soil within the predominately clayey-like beds ...".

2. The PELA report provides refined information to assist in characterizing conditions which affect brine production. Additional exploration is not deemed necessary to evaluate the potential impacts of the landfill on Cargill's operation. As concluded in Response S-20-3, the refined information does not alter the potential water quality impacts or mitigation measures as described in the Draft EIR/EIS and Supplement, but rather demonstrate that the conclusions are conservative.

Response S-20-35

1. As detailed in Response S-20-4, an extensive analysis of the potential for active faults or other geologic hazards present at the Bolo Station site has been performed as documented in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, and as further reviewed for this Final EIR/EIS. A list of the geological reports and maps which have been reviewed is included as Table E.1, Appendix E of this Final EIR/EIS. There is no evidence to indicate that Holocene faulting occurs on the proposed landfill site (see Table E.2, Appendix E of this Final EIR/EIS).

2. As recommended by the County Geologist (see Appendix D of this Final EIR/EIS), logging by a Certified Engineering Geologist during excavation of waste cells will be performed to confirm the absence of faulting beneath the site.

Response S-20-36

1. As discussed in Response S-20-18, based on review of the fissures, it has been determined that these features are likely related to subsidence due to ground water level lowering caused by climatic and environmental changes through geologic time, and local ground water withdrawal. The required logging of cell excavations would provide data to enable refined assessment of any geological discontinuities and allow landfill design modifications, if necessary.

Response S-20-37

1. As discussed in Response S-20-26, based on the site investigation and geomorphic interpretations, the probability of continuous, highly permeable channels below the ground water table would be low. Also, releases beneath the liner would be captured by the UZM layer instead of migrating to a lower sand pathway.

Response S-20-38

1. As detailed in Section 5.1.1.2.1 of the Supplement, the estimate of ground settlement due to consolidation was conservatively based on the Jacobs (1991b) sampling and analysis which classified the soils as "normal" to "slightly over consolidated." Moreover, laboratory consolidation tests were conducted on actual samples to estimate settlement. Also, as discussed in Response S-20-30, the depth of influence of landfill loading in the southwest portion of the site (where excavation depths and waste fill thickness are minimum), as referenced in the comment, would not exceed the depth of exploratory borings.

Response S-20-39

1. The geologic setting of the site was further reviewed by PELA (1994). PELA developed a general environment-of-deposition model based on information previously collected at the site including boring logs and laboratory analyses, to provide a three-dimensional picture (fence diagram) of the geology beneath the site (PELA, 1994). The geology at the site, as depicted in the model, was verified by PELA's field investigation. The site is dominated by distal fan and playa margin sediments with increasing finer-grained playa sediments at depth. As depicted in the fence diagram, the playa and alluvial deposits are most likely interfingered. The model is consistent with the findings of Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, which indicate that there are no abrupt lithology changes across the site.

2. As discussed in Response S-20-4, the only fissure identified on the site was located in the southeast site corner (Fissure N), and has been attributed to past ground water extraction by National Chloride.

3. As noted in Response S-20-28, dry density is only an indirect measure of potential consolidation. Rail•Cycle developed more direct data by consolidation testing of actual samples. The settlement analysis performed by Rust demonstrated, using reasonably conservative assumptions, a settlement profile which would be approximately 0.01 (vertical to horizontal) and would not damage flexible landfill environmental control systems (e.g., flexible membrane liners, flexible gas collector pipes) (Rust, 1993c).

Response S-20-40

1. This comment does not specifically indicate the reasons for the opinion that ground water conditions at the site are inaccurately characterized. As described in Response S-20-3, the data obtained from the recent PELA drilling (HAL-1 and HAL-2) confirmed or clarified previous data as provided in the Draft EIR/EIS and Supplement. The refined information does not change the potential water quality flow or quantity impacts as identified in the Draft EIR/EIS and Supplement, and demonstrates that the assessments are conservative.

2. The final monitoring program would conform to Subtitle D and CCR Title 23, and is being developed in consultation with the RWQCB. The monitoring program, as described in the Supplement, is a proposed system and is typical of monitoring systems being installed at existing landfills under current state and federal regulations. The specific designs of both the vadose zone monitoring program (i.e., the UZM system) and monitoring wells will undergo review by the RWQCB and be modified, if necessary, to meet permitting requirements and assure adequate monitoring.

Response S-20-41

1. This comment does not specifically identify the analyses/descriptions in the Rust reports and Supplement which the commenter believes to be inaccurate. It is, therefore, not possible to provide a specific response.

Response S-20-42

1. Sections 4.2 and 5.2 of the Supplement summarized a number of technical reports which provided data to support the absence of significant vertical gradients across the site. Nevertheless, the ground water modeling conducted to estimate potential impacts in the event of a release assumed a vertical gradient within the Cargill production wells radius-of-influence (Rust, 1993c). A vertical downward gradient of 0.005 feet/feet (equal to the existing horizontal gradient across the site), was incorporated into the modeling. The conservative analysis, therefore, took into account the possibility of a vertical gradient as suggested by this comment.

2. The controlling factor for the movement of a potential release, as calculated in Section 5.2.1.2.2 of the Supplement and support technical reports, would be the horizontal rate of movement. As discussed in the Supplement, it would take ground water over 10 years to reach from the southwest corner of the landfill footprint to the Cargill wells. This rate is conservative based on the average horizontal conductivity across the proposed site of 11.5 feet per day. For the more fine-grained soils in the southwest corner of the proposed landfill with a horizontal ground water movement rate of 70 feet per year (i.e., 0.19 feet per day), the travel time would be much greater. Vertical gradients logically steepen as ground water approaches the Cargill wells.

Response S-20-43

1. The water producing zones within the Cargill wells have been described by Cargill and Rail•Cycle geologists as coarse-grained interbeds, very thin laminations of sandier soil, coarse sand beds, and layers of rock salt, gypsum chips, and broken rock or gravel. The soil profile obviously contains layers or lenses of more permeable material which is likely to be a source of greater and higher yield of ground water during pumping.

2. The discussion in Section 5.2 of the Supplement was based on the assumption that the Cargill wells have screened intervals beginning at 270 feet below ground surface. Since the screened portions actually begins at only 120 feet below ground surface and, therefore, extends into the upper portions of the aquifer, the comment in the Supplement does not apply.

3. As discussed in Response S-20-31 and S-20-42, the controlling factor for the movement of a potential release would be the horizontal rate of movement. Vertical gradients logically steepen as ground water approaches the active Cargill wells, but are not a significant factor in determining the travel time for a potential release to migrate to the monitoring wells or offsite.

Response S-20-44

1. As discussed in Response S-20-40, the final monitoring program would conform to Subtitle D and CCR Title 23. The proposed system will require extensive review and approval by SWRCB, CIWMB, and RWQCB. If there is doubt as to the effectiveness of the proposed system, another UZM system can be incorporated in the design.

Response S-20-45

1. A 1,000-foot spacing for ground water monitoring wells has been proposed by Rail•Cycle to the RWQCB. As noted in this comment, the system as proposed will require the approval of the RWQCB. The final spacing will be indicated in the WDRs Monitoring and Reporting Program issued by RWQCB for the site.

Response S-20-46

1. Design of monitoring wells, including lengths of screened intervals, has not been undertaken. Design of monitoring wells will be dependent on site-specific geotechnical conditions and consultation with the RWQCB. At this time it is anticipated that the length of screened casing for each monitoring well will range between 10 and 20 feet.

Response S-20-47

1. As noted in Response S-20-45, locations for the monitoring wells on the project site have been proposed by Rail•Cycle and are being reviewed by the RWQCB. The final location of monitoring wells will be developed in consultation with the RWQCB and will be dependent on geotechnical and hydrogeological conditions (including consideration of gradients caused by nearby ground water withdrawal). While the exact spacing of wells will be developed in consultation with RWQCB, wells will be located along landfill boundaries at upgradient and downgradient positions, as shown in Figure 5.2.2 of the Supplement.

Response S-20-48

1. The ground water Detection Monitoring Program would conform to Subtitle D and CCR Title 23, and the requirements of the RWQCB. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the leachate evaporation pond would be lined. Because the leachate ponds are evaporation ponds, in the event of a liner failure, the liner could be easily repaired and, if necessary, remediation of the subsurface soil accomplished. The proposed action has been refined since distribution of the Supplement to include lysimeters beneath the leachate collection sumps. If required by RWQCB, monitoring wells will be placed downgradient of the evaporation ponds.

Response S-20-49

1. The evaluation of the proposed design for the Bolo Station, as referenced in this comment, was prepared for Cargill by Kirk W. Brown and Linda Descanso Nelson. The findings of their report represent a disagreement among experts, which in accordance with CEQA, does not make an EIR inadequate (Section 145151 of CEQA Guidelines). Based on the numerous site-specific analyses conducted for the proposed Bolo Station Landfill, Section 5.4 of the Draft EIR/EIS and Section 5.2 of the Supplement concluded that ground water downgradient from the site would not be impacted. Moreover, recent studies conducted by two of the foremost landfill liner authorities (Giroud and Bonaparte, 1989) have concluded that releases from a landfill can be controlled by the type of composite liner systems proposed for the Bolo Station Landfill. This study and its findings have been recognized by the SWRCB (SWRCB, 1992).

2. As explained in previous responses, the final monitoring program would conform to Subtitle D and CCR Title 23. The proposed system will require extensive review and approval by SWRCB, CIWMB, and RWQCB. If there is doubt as to the effectiveness of the proposed system, other more conventional system for vadose zone monitoring can be incorporated in the design.

Response S-20-50

1. As discussed in the Draft EIR/EIS, if water quality protection standards are exceeded, Rail•Cycle would be required by CCR Title 23, Chapter 15, Article 5 to implement, in consultation with the LEA and RWQCB, a corrective action program to remediate the affected ground water. The potential for a pump-and-treat program to compound impacts to Cargill's wells is acknowledged in the Draft EIR/EIS (see Section 5.4.5.2). As discussed, to avoid this additional impact, Rail•Cycle could implement a financial mechanism which would pay for the increased processing required to purify the final calcium chloride and/or sodium chloride product.

Response S-20-51

1. See Response S-20-33 and S-20-34 for discussion of information regarding the lithology of production zones for Cargill brine wells. As discussed, additional information was provided by the PELA investigation to assist in characterizing conditions which affect brine production (PELA, 1994). The subsequent information does not alter the potential water quality impact or mitigation as described in the Draft EIR/EIS and Supplement.

Response S-20-52

1. For the reasons discussed in previous responses (S-20-38 and S-20-39), the consolidation estimates for the proposed project are believed to be conservative.

Response S-20-53

1. Each of the issues identified in this comment have been previously addressed in responses to other comments in this letter. Based on the analysis conducted for the site and documented in the Supplement, the double-composite liner system in conjunction with the UZM system and downgradient monitoring wells, and the requirements of CCR Title 23 to implement corrective action in the event a release occurs from the landfill, the proposed landfill would not impact ground water downgradient from the site.

S-21

ROY J. SHLEMON & ASSOC., INC.
Geological and Environmental Consultants

Post Office Box 3066
Newport Beach, California
92659 - 0620 U.S.A.
Tel: (714) 675 - 2696
Fax: (714) 675 - 5088

Quaternary Geology
Economic Geomorphology
Soil Stratigraphy
Geoarchaeology

18 February 1994

County of San Bernardino
Planning Department
385 N. Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182

Attn: Mr. Randy Scott

Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, CA 92507-0714

Attn: Mr. Doug Romoli

Gentlemen:

Please find attached my review and comments pertaining to the Draft Environmental Impact Report/Environmental Impact Statement and Supplement (DEIR/DEIS) for the proposed Rail-Cycle, Bolo Station Landfill in San Bernardino County.

This review, prepared on behalf of Cargill Salt Company, focuses on technical issues dealing with the origin of "Lineament A" and fissure systems in the Rail-Cycle area. It points that the DEIR/DEIS is inadequate, for the origin of these features is still unknown, resulting in great uncertainty about the suitability of the proposed site.

A map showing the location of the several features discussed in the review is also attached. Likewise provided is a "References Cited" section that calls attention to the abundance of pertinent technical literature concerning ground fissures and their potential impact on the integrity of the proposed landfill and adjacent environment.

Sincerely,

Roy J. Shlemon, Ph.D.

RJS:qgg

encs.
cargill.w60

S-21

ROY J. SHLEMON & ASSOC., INC.
Geological and Environmental Consultants

Post Office Box 3066
Newport Beach, California
92659 - 0620 U.S.A.
Tel: (714) 675 - 2696
Fax: (714) 675 - 5088

Quaternary Geology
Economic Geomorphology
Soil Stratigraphy
Geoarchaeology

REVIEW AND COMMENTS

DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT:
PROPOSED RAIL-CYCLE BOLO STATION LANDFILL,
SAN BERNARDINO COUNTY, CALIFORNIA

by

Roy J. Shlemon

prepared for

Cargill Salt Company

Newark, California

February 1994

EXECUTIVE SUMMARY

This document reviews and comments on technical issues pertaining to the Draft EIR/EIS (November 1992) and Supplement (December 1993) for the proposed Rail-Cycle Bolo Station Landfill in San Bernardino County. It particularly focuses on: (1) the origin of aerial-photographic Lineament A; and (2) the origin, location, predictability, and potential impact of ground fissures adjacent to, and possibly under the southern part of the proposed landfill.

This review specifically points out that the investigations necessary to fully address these technical issues have not been completed. The EIR/EIS conclusions are therefore inadequately supported. These technical issues bear directly upon the suitability of the proposed landfill location, and hence must be resolved now, rather than deferred to a possible later design phase.

Lineament A is a low topographic escarpment about 6,000 ft long that extends to within 4,200 ft of the proposed site. It coincides in trend with linear ground fissures and therefore may not be merely an old shoreline as postulated in the EIR/EIS. Accordingly, lineament trenching and other geotechnical investigations are warranted in order (a) to comply with

recommendations of the proponent's consultants; (b) to provide unambiguous visual observations about the underlying stratigraphy, rather than relying on geophysical "remote-sensing;" (c) to determine its geologic relation to the fissures; and (c) to insure that it is not the locus of future potential subsidence that may impact landfill integrity and the adjacent environment.

Surface ground fissures occur near the southwestern and southeastern corners of the proposed landfill. Their origin, as postulated in the draft EIR/EIS, is groundwater withdrawal, ostensibly caused by existing brine wells. However, the EIR/EIS is incomplete, for there are many origins for fissures that have not been addressed, ranging from fault control to hydrocollapse of underlying sediments. Indeed, as documented in technical literature, the presence of fissures proved to be a major factor leading to the recent abandonment of a proposed waste facility in terrain similar to that of the Rail-Cycle landfill.

Unanswered fissure questions that bear upon the suitability of the proposed Rail-Cycle landfill are: (1) What are the causes of the Rail-Cycle area fissures? (2) What geological processes control their linearity, their trend toward the landfill and their depth?; (3) Could other surface or subsurface fissures develop during the operational lifetime of the landfill and thereby channel possible subsurface contaminant flow? (4) Can fissure occurrence and potential impact on the landfill be predicted with confidence in order to ensure public safety and protection of the environment?

Until these questions are answered by levels of geologic investigation typically performed for large-scale landfill siting, the origins of Rail-Cycle area Lineament A and fissures remain unresolved. Accordingly, the conclusions provided in the draft EIR/EIS and Supplement are inadequately supported, highly questionable, and hence insufficient to meet requirements of the California Environmental Quality Act and the Federal Environmental Policy Act.

REVIEW AND COMMENTS

DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT:
PROPOSED RAIL-CYCLE BOLO STATION LANDFILL,
SAN BERNARDINO COUNTY, CALIFORNIA

INTRODUCTION

This document reviews the Draft (November 1992) and Supplemental (December 1993) Environmental Impact Report/Environmental Impact Statement (EIR/EIS) pertaining to the proposed Rail-Cycle Bolo Station Landfill near Amboy in San Bernardino County, California. The review specifically addresses two technical issues: (1) the origin of aerial photographic lineaments; and (2) the origin, location, and predictability of adjacent ground fissures. The resolution of these issues is critical to evaluate the suitability of the proposed landfill location and to determine its impact on the environment, problems that must be resolved prior to an engineering-design phase.

These review comments are based on critique of the Draft EIR/EIS and Supplement and supporting documents submitted by proponents for the proposed landfill, on interpretation of pertinent maps and aerial photographs, on field observations, and on personal investigation of lineaments, fissures and faults in arid regions throughout the southwestern United States.

Location and geologic maps, as well as trench logs and geophysical survey data, are provided in the EIR/EIS-cited reports and hence are referred to, but not replicated in this review. For convenience, however, a compilation map showing the proposed site and its relation to lineaments, fissures, faults and pumping wells, as discussed in this review, is presented as Figure 1.

LINEAMENT ANALYSES

Aerial-photographic lineaments have many origins, ranging from purely cultural features, such as old roads, to geologic phenomena, such as surface faults and fissures. Several aerial photographic lineaments were identified in the Jacobs Engineering Group (Jacobs, 1991) analysis of potential seismic hazards. One such feature, informally designated "Lineament A," is approximately 6,000-ft long and observed to extend within 4,200 ft from the southwest corner of the proposed landfill (Jacobs, 1991, p. 4-20). ①

As shown on Figure 1, this lineament coincides with several field-documented ground fissures. The lineament and many nearby fissures also correspond (Figure 1) with a zone of inferred bedrock faulting shown on the proponent's gravity survey map. However, the draft Supplemental EIR/EIS concludes (1993, p. 4.1-3) that Lineament A is not a fault and therefore ostensibly does

not impact the site, as interpreted from geophysical surveys and field observations completed after the Jacobs (1991) investigations. Rather, the Lineament is deemed to be an old Bristol Lake shoreline, presumably evident by its aerial-photographic extent and by the lack of obvious faults as exposed in three trenches, each less than about 100-ft long, placed some 4,000 ft north of the lineament (Fig. 1). However, uncertainty as to a reasonable northward projection of Lineament is very high. Accordingly, it is questionable whether the short trenches truly intercepted northern projection(s) of Lineament A. Traditionally, owing to the absence of extensive natural or man-made exposures, normal "level of assurance" investigations for such large landfills include emplacing and logging trenches with cumulative lengths of many hundreds to thousands of feet. This is necessary to thoroughly document that the landfill is not impacted either by faults or fissures. Unfortunately, however, the lack of such definitive trenching at and near the proposed landfill raises serious questions about the completeness of field investigations, and hence about the adequacy of the draft EIR/EIS. ① CONT.

The present EIR/EIS "definitive" conclusions for the origin of Lineament A have profound significance about the integrity of the landfill and its potential impact on the regional environment. For example, as pointed out by Jacobs (1991, p. 4-26): "Lineament A, if found to be a fault, could create two geologic hazards: displacement along the fault line and ground shaking caused by an earthquake." Accordingly, Jacobs recommended that at least two trenches, ostensibly of sufficient depth and length, be placed across Lineament A (1991, p. 4-26). Such exposures and resulting documentation would provide unambiguous geologic information about the likely origin of Lineament A, whether that be a fault, fissure or shoreline. Relying solely on seismic-data interpretation is fraught with difficulty, for geophysical surveys are a form of remote sensing that complement, rather than substitute, properly documented trench exposures.

① CONT.

The draft EIR/EIS is thus remiss, if not wholly inadequate, by neglecting to point out the necessity for appropriate trenching of Lineament A as recommended by Jacobs (1991). These trenches are sorely needed, for previous subsurface exposures of Lineament A were limited to: "A series of shallow (6-12 inches) hand-dug trenches and pits . . . ." (Jacobs, 1991, p. 4-20), certainly not sufficient to geologically characterize the very large, proposed landfill area. Therefore, the ultimate origin of Lineament A remains enigmatic. Indeed, it may not be a fault, if one were to disregard the proponent's original gravity-survey data and rely only on seismic interpretation. However, a critical question remains unanswered: Is it but sheer coincidence that Lineament A and the fissures coincide in location and that both trend northerly toward the proposed landfill (Fig. 1)? An answer is not provided in the EIR/EIS or Supplement. The issue is therefore of concern until, as recommended by the proponent's consultants (Jacobs, 1991, p. 4-26), appropriate trenching and documentation is completed.

① CONT.

GROUND FISSURES

The Draft EIR/EIS and Supplement, unfortunately, inadequately address the potential impact of ground fissures on landfill integrity, and on possible subsurface contaminant pathways. There are, therefore, additional serious questions about the suitability of the proposed Rail-Cycle landfill.

②

Ground fissures in the southwestern United States have significantly impacted many engineered structures including canals, residential developments, and proposed waste repositories (see summaries in Holzer, 1984; Johnson, 1991; and Johnson and others, 1990). Fissures have now been identified near the proposed Rail-Cycle Bolo Landfill site. Specifically, as documented in the proponent's "Phase II report" (Jacobs, 1991), two fissures systems are identified: one near the southwestern corner of the site (areas B, C, and D); the other near the southeastern boundary (areas L, M and N; Fig. 1). The proponent's investigations and the Draft EIR/EIS and Supplement propose that all fissures are of groundwater origin. Unfortunately, this may not be the case, for there are multiple causes for modern and possible paleo-fissures at and near the site. This potential multi-causation has not been addressed in the EIR/EIS and Supplement. Such an omission is unacceptable, for prudence and public safety dictate that complete fissure ② CONT. investigations be carried out before licensing of the proposed landfill can be contemplated.

The fissures near the southwest corner of the landfill are particularly cryptic, for in map view they are left-stepping, often indicative of subsurface fault control, most are relatively straight, projecting northward toward the site, and some are over 2,000-ft long (Fig. 1). The visible fissures, as identified in the Jacobs (1991) report, are several presently-open or filled features in the southwestern "B" area; subsidence cracks and fissures in the "C" area; and filled fissures in the "D" area (Fig. 1; Jacobs, 1991, Section 4.2.4).

Fissure Causation

③ The EIR/EIS-inferred groundwater-withdrawal origin for the Rail-Cycle area fissures stems from the apparent near proximity

of fissures and pumping wells (Fig. 1). It is further assumed that the fissures are merely a byproduct of ground settlement stemming from groundwater withdrawal (EIR/EIS, 1992, Section 5.2.1.2.2). These suppositions, however, do not explain the linearity of many fissures and their proximity, if not continuation, with the yet inadequately investigated Lineament A.

There are many causes for fissures, and several processes ③ CONT. may be taking place at the same time. As documented in the extensive literature, excluding mining-induced or sinkhole collapse, fissures may be caused, in whole or part, by: (1) aseismic fault creep; (2) earthquake-induced ground failure; (3) groundwater pumping; (4) dissolution of subsurface sediments; (5) differential compaction or hydrocompaction; and (6) desiccation of near-surface clayey sediments.

Fissures induced by aseismic fault creep have been documented throughout the southwestern United States, particularly in Nevada and in southern California (see, for example, Bell and others, 1989; Clark, 1972; Fett and others, ④ 1967; Pampeyan and others, 1988; Shlemon and Davis, 1992; Swadley and Scott, 1988; Zellmer and others, 1985). Such fissures, where exposed in trenches, often do not have near-surface vertical displacement, but only open cracks that may coincide with nearby active faults. Whether any or all of the Rail-Cycle area fissures owe their origin to aseismic creep has not yet been documented; and a carefully planned trenching program is thus required. ④ CONT

Earthquake-induced ground failures often take the form of fissures, observed in almost all recent, moderate to high shaking, California earthquakes. The cracks are normally secondary features, usually caused by differential settlement or by near-surface liquefaction. This possible origin for the Rail-Cycle area cracks is similarly not addressed in the Supplemental EIR/EIS. ⑤

Groundwater pumping is a common cause of fissures in the southwestern United States (Johnson, 1991; Johnson and others, 1990; Holzer, 1984; Slaff, 1990). However, groundwater causation does not inherently explain fissure geometry and location. Typically, en-echelon, linear and left-stepping fissures, as observed in the Rail-Cycle investigation area, are controlled by subsurface discontinuities, usually buried faults or steep bedrock fronts (Bouwer, 1977; Holzer and Pampeyan, 1981; Jachens and Holzer, 1982; Schumann, 1974; Schumann and Poland, 1969). Such discontinuities may well occur under the southwestern fissure system, as appaarently depicted on gravity survey data (Jacobs, 1991). ⑥

Groundwater pumping often causes aquifer compaction and increases subsurface tensile stresses. The resulting fissures propagate

from regional groundwater levels to the surface over a zone usually underlain by subsurface discontinuities (Holzer, 1984; Lofgren, 1976). This is well exemplified by the recent Temecula-area fissures that have lengths and geomorphic form comparable to those in the Rail-Cycle area (Corwin and others, 1991; Leighton & Associates, 1987; Moran, 1989; Shlemon and Davis, 1992). An extensive trenching program showed that these fissures, although likely induced by groundwater withdrawal, coincided with a previously unreported fault that ultimately proved to be "active" (Holocene). Likewise, many damaging Las Vegas Valley fissures are attributable to groundwater withdrawal. Here, fissure location is controlled by nearby "compaction" faults, although local sediment desiccation or soil hydrocollapse cannot be ruled out (Bell, 1981; Bell and others, 1992; Werle and Stille, 1991). ⑥ CONT

Additionally, low escarpments, not dissimilar in form and length to Lineament A, may be attributable to groundwater withdrawal and subsurface compaction (Kreitler, 1977; Verbeek and others, 1979). Although some apparent "curvilinear" Rail-Cycle fissures (Fig. 1) may have been caused by brine well extraction, the linearity of the "B" system and its apparent correspondence with Lineament A, suggest that other, yet unexplained mechanisms may be operative. These are factors not considered in the Draft EIR/EIS and Supplement. The documents are inadequate; and hence site-suitability is still questionable. ⑦

⑧ Dissolution of subsurface sediments may also contribute to reported subsidence and perhaps to some Rail-Cycle fissures. The presently-observed fissures occur in gypsiferous and saline deposits in Bristol Lake, sediments typically susceptible to dissolution (Cibor, 1983). Dissolution is particularly likely if regional or perched water levels rise, a potential phenomenon under the landfill where low-permeability, Pleistocene pluvial clays interfinger with more coarse-grained medial and distal fan sediments. This possibility of dissolution-caused fissures and their potential impact on landfill integrity and the environment is likewise not addressed in the Supplemental Draft EIR/EIS.

⑨ Hydrocompaction and hydrocollapse of metastable sediments are other well-recognized causes of fissures in arid and semi-arid regions (Bara, 1976; Dudley, 1970; Holzer, 1984). Rapid wetting of previously unsaturated or partially-saturated sediments may cause break down of granular interstitial binding agents, and ultimately volume loss with or without structural loading. This particularly occurs in silts and fine sands, sediments typically associated with fluvial and eolian deposits such as those in the proposed landfill area.

Additionally, surface hydrocollapse and associated ground fissures may significantly affect the integrity of landfills and other engineered structures (Curtin, 1973; Gibbs and others, 1967; Johnson, 1991; Johnson and others, 1990; Keaton and Shlemon, 1991). Recent investigations also show that rising water levels, especially along steep bedrock-alluvial contacts, may cause subsurface hydrocollapse resulting in ground fissures that are geomorphically indistinguishable from those induced by surface hydrocollapse or groundwater withdrawal (Shlemon and Hakakian, 1992). Whether or not the Rail-Cycle fissures are caused by hydrocollapse remains unanswered in the Draft EIR/EIS and Supplement. ⑨ CONT.

⑩ Desiccation of near surface clay is another cause of fissures not addressed in the Draft EIR/EIS. Such desiccation is prevalent in smectites, clay minerals common in Bristol Lake sediments. In fact, this origin has been ascribed to a recent "giant desiccation stripe" that caused major cracks across State Highway 58 near Barstow (Knott, 1992). Further, some 17 different Mojave Desert playa-lake basins are known to be beset by fissures, their cause variously ascribed faulting, subsidence, uplift or massive desiccation (Fife, 1980).

⑪ Additionally, playa lake sediments, comparable to those in the southern landfill area, are frequently the locus of polygonal cracks, some attaining linear dimensions hundreds of feet long (Neal and others, 1968). However, linear fissures also occur. Most originate in buried, near-surface, late Pleistocene clay beds covered by distal fan sediments (SEACOR, 1992), a stratigraphic setting comparable to the southern part of the proposed Rail-Cycle landfill.

Unanswered Fissure-Related Questions

Several pertinent questions have yet to be addressed in the EIR/EIS and Supplement. Specifically: (1) What are the causes of the Rail-Cycle area fissures, and what investigations have been carried out to support the EIR/EIS conclusions?; (2) What geological processes control the location, linearity and depth of the fissures;? (3) Could other fissures develop during the operational and closure life of the proposed landfill?; and (4) Can fissure occurrence and potential impact be predicted with confidence to ensure public safety and protection of the environment? ⑫

No specific fissure investigations are documented in the Draft EIR/EIS and Supplement, merely the supposition that they are "insignificant," the result of local groundwater withdrawal. It therefore appears that: (1) The ultimate causes of the Rail-Cycle area fissures are yet unknown, although some may stem from groundwater pumping; (2) the location of the fissures is not adequately addressed in the EIR/EIS and, owing to a lack of trenching across the fissures and Lineament A, the possible of a controlling fault or other subsurface discontinuity needs to be fully addressed; (3) similar fissures may be present adjacent to, or perhaps under the southern portion of the proposed landfill, a factor particularly significant to site suitability if the

fissures are related to aseismic creep or if increased groundwater pumping be contemplated either during landfill construction or during operation of the Cargill brine facilities; and (4) the confidence to predict the location and size of future fissures is inherently low, for nothing is known about the subsurface extent of fissures that may well extend hundreds or thousands of feet beyond their surface expression. In fact, it may be expected that subsurface piping, and thus fissure length, will continue as surface runoff is increasingly intercepted by the fissures. If, as postulated in the Draft EIR/EIS, that pumping wells control fissure location, then the fissures will likely extend farther north into the landfill, comparable to the present distance south of the wells (Fig. 1). ⑫ CONT

Most groundwater-withdrawal fissures extend vertically to regional water levels. In the southern part of the proposed landfill, these levels are tens of feet, far below contemplated over-excavation and removal of desiccation-prone, near surface sediments. Thus present is another uncertainty about the suitability of the proposed Rail-Cycle site.

Additionally, the possibility that now-buried fissures exist adjacent to or under the southern part of the proposed landfill cannot be discounted. As shown in the Jacobs (1991) maps, sand dunes and sheets cover much of the area. Now-buried fissures may thus be present and undetectable. Subsurface fissures usually have vertical cracks less than a few cm wide that have not yet propagated to the surface. Accordingly, they are also "unresolvable" by ground penetrating radar (GPR) or other forms of near-surface remote sensing, a point brought forth in the Jacobs (1992) Geophysical Survey Report (p. 22): "Numerous other GPR anomalies are evident on the profile (Appendix A, Figure 3), but they did not correspond to anomalies in seismic survey data. . . . "Their origin may be related to one or a combination of the following features: . . . [including] . . . Concealed displacement of soils due to a fault or subsidence crack." It thus seems evident that the four, each less than 100-ft long, trenches emplaced across geophysical anomalies inherently did not expose the "numerous other GPR anomalies," some of which may well be subsurface fissures. Only deep, extensive and well documented trenching will resolve the potential subsurface fissure issue, investigations that have yet to take place.

⑫ CONT.

Regardless of their origin, many subsurface fissures may enlarge and ultimately become preferred pathways for possible contaminant flow. Indeed, the recognition of paleo-fissures, only observed in deep trenches, proved to be the main factor leading to abandonment of a proposed waste disposal site (Keaton and Shlemon, 1990, 1991).

In sum, there are many causes for ground fissures and many reasonable hypotheses that explain their trend, extent and form. However, the present Draft EIR/EIS and Supplement suppose that the Rail-Cycle area fissures are merely local groundwater-withdrawal phenomena, ostensibly not potentially impacting the landfill and adjacent environment. This supposition is subject to great doubt until trenching and other appropriate investigations are completed. These investigations are necessary to provide an adequate level of technical assurance for siting large-scale, waste-facilities. Until these important investigations are completed and thoroughly documented there is, unfortunately, great uncertainty about the impact of present and future fissures on the proposed Rail-Cycle Bolo Station Landfill and on the surrounding environment.

⑫ CONT.

REFERENCES CITED

Bara, J., 1976, Collapsible soils: American Society of Civil Engineers Annual Convention, Philadelphia, Preprint 27979, 13 p.

Bell, J. W., 1981, Subsidence in Las Vegas Valley: Nevada Bureau of Mines and Geology Bulletin 95, 84 p.

Bell, J. W., Ramelli, A. R., DePolo, C. M., Maurer, D. K., and Prudic, D. E., 1989, Extensional cracking along an active normal fault: A case for creep on a Basin and Range fault? (abs.), Seismological Research Letters, v. 60, p. 30.

Bell, J. W., Price, J. G., and Mifflin, M. D., 1992, Subsidence-induced fissuring along preexisting faults in Las Vegas Valley, Nevada: in Stout, M. L. (ed), Proceeding of the 35th Annual Meeting, Assoc. of Engineering Geologists, 1992, p. 66-75.

Bouwer, H., 1977, Land subsidence and cracking due to ground-water depletion: Ground Water, v. 15, no. 5, p. 358-364.

Cibor, J. M., 1983, Geotechnical considerations of Las Vegas Valley: American Society of Civil Engineers, Geotechnical Engineering Engineering Division, Annual Convention, (Houston, Texas), p. 351-373.

Clark, M. N., 1972, Collapse features along the Coyote Creek fault in the Borrego Mountain Earthquake of April 9, 1968: U.S. Geological Survey Professional Paper 787, p. 190-207.

Corwin, E., Alhadeff, S., Oggel, S., and Shlemon, R., 1991, Earth fissures, urbanization and litigation: a case study from the Temecula area, southwestern Riverside County, California: in Johnson, I. (ed.), International Association of Hydrological Science, Fourth International Symposium on Land Subsidence (Houston, Texas), Publication 200, p. 291-299.

Curtin, G., 1973, Collapsing soil and subsidence: in Moran, E., Slosson, J. E., Stone, R. O., and Yelverton, C. A. (eds.), Geology, seismicity, and environmental impact: Association of Engineering Geologists Special Publication, p. 89-101.

Dudley, J. H., 1970, Review of collapsing soils: Journal of the Soil Mechanics and Foundations Division, Proceedings of the American Society of Civil Engineers: Preprint 7278 SM 3, p. 925-947.

Fett, J., Hamilton, D. H., and Fleming, F. A., 1967, Continuing surface displacement along the Casa Loma and San Jacinto faults in San Jacinto Valley, Riverside County, California: Association of Engineering Geologists, Engineering Geology, v. 4, no. 1, p. 22-32.

Fife, D. L., 1980, Giant desiccation polygons and playa features: in Fife, D. L., and Brown, A. R. (eds.), Geology and mineral wealth of the California desert: South Coast Geological Society (Anaheim, California), p. 414-429.

Gibbs, H. J., and Bara, J. P., 1967, Stability problems of collapsing soils: Journal of the Soil Mechanics and Foundation Division, American Society of Civil Engineers, v. 93, Paper 5331, No. SM4, p. 577-594.

Holzer, T. L., 1984, Ground failure induced by ground-water withdrawal from unconsolidated sediments: in Holzer, T. L. (ed.), Man-induced land subsidence: Geological Society of America Reviews in Engineering Geology, v. VI, p. 67-105.

Holzer, R. L., and Pampeyan, E. H., 1981, Earth fissures and localized differential subsidence: Water Resources Research, v. 17, no. 1, p. 223-227.

Jachens, R. C., and Holzer, T. L., 1982, Differential compaction mechanism for earth fissures near Casa Grande, Arizona: Geological Society of America Bulletin, v. 93, no. 10, p. 998-1012.

Jacobs Engineering Group, 1991, Phase II Geologic, hydrogeologic and geotechnical site characterization study, Bolo Station facilities, San Bernardino County: for Rail-Cycle, Los Angeles; Consultants' Tech. Report, variously paginated, plates.

Jacobs Engineering Group, 1992, Geophysical survey report, Bolo Station Facilities, San Bernardino County: for Rail-Cycle (Los Angeles), 34 p., plate.

Johnson, A, I. (ed.), Land subsidence: International Association of Hydrological Science, Fourth International Symposium on Land Subsidence (Houston, Texas), Publication no. 200, 690 p.

Johnson, A. I., Carbognin, L., and Ubertini, L. (eds.), 1990, Land subsidence: International Association of Hydrological Science, Proceedings of the Third International Symposium on Land Subsidence (Venice, Italy), Publication no. 151, 939 p.

Keaton, J. R., and Shlemon, R. J., 1990, The Fort Hancock, Texas, earth fissure system: possible causes and site selection issues for critical facilities: in Robinson, L. (ed.), Proceedings of the 1990 Annual Symposium on Engineering Geology and Geotechnical Engineering (no. 26), Idaho State Univ., College of Engineering (Pocatello), p. 9-1 - 9-11.

Keaton, J. R., and Shlemon, R. J., 1991, The Fort Hancock Earth Fissure System, Hudspeth County, Texas: Uncertainties and implications: in Johnson, A. I. (ed.), Land subsidence: International Association of Hydrological Science, Fourth International Symposium on Land Subsidence (Houston, Texas), Publication no. 200, p. 281-290.

Knott, J. R., 1992, Effects and mitigation of ground fissuring along State Highway 58, Hinkley Valley, San Bernardino County, California: in Stout, M. L. (ed.), Proceedings of the 35th Annual Meetings of the Association of Engineering Geologists: 134-142.

Kreitler, C. W., 1977, Fault control of subsidence, Houston, Texas: Ground Water, v. 15, no. 3, p. 203-214.

Leighton & Assoc., Inc., 1987, Geotechnical investigation of "ground crack," Tract 19872, Wolf Valley, Rancho California Area, County of Riverside, California: Consultants' Tech. Report, Project 6851602-03 for Richmond American Homes (Irvine, California), 19 p., plates.

Lofgren, B. E., 1976, Land subsidence and aquifer-system compaction in the San Jacinto Valley, Riverside County, California--a progress report: U.S. Geological Survey Journal of Research, v. 4, no. 1, p. 9-18.

Moran, D. E., Inc., 1989, Significance of ground cracks, Riverside County Tract No 19872, Pala Road at Loma Linda Road, Riverside County, California: Consultants' Tech. Report, Job No. 88-23: for Best, Best & Krieger (Riverside, California, 69 p., plates.

Neal, J. T., Langer, A. M., and Kerr, P. F., 1968, Giant desiccation polygons of Great Basin playas: Geological Society of America Bulletin, v. 79, no. 1, p. 69-90.

Pampeyan, E. H., Holzer, T. L., and Clark, M. M., 1988, Modern ground failure in the Garlock fault zone, Fremont Valley, California: Geological Society America Bulletin, v. 100, p. 677-691.

Schumann, H. H., 1974, Land subsidence and earth fissures in alluvial deposits in the Phoenix area, Arizona: U.S. Geological Survey Miscellaneous Investigations Map I-845-H, scale 1:250,000, 2 sheets.

Schumann, H. H., and Poland, J. F., 1969, Land subsidence, earth fissures, and ground-water withdrawal in south-central Arizona, U.S.A.: in Proceedings, International Land Subsidence Symposium, 1st, Tokyo, v. 1: International Association of Hydrological Sciences Publication 88, p. 295-302.

SEACOR, 1992, Investigation of ground cracks, Sunset Ranch, Tentative Tract 46761, Lancaster, California: Consultants' Technical Report for Property 14 Investment and Lancaster Development Company (San Mateo, California), Job No. 40047-001-02, 2 vol, variously paginated, plates.

Shlemon, R. J., and Davis, P., 1992, Ground fissures in the Temecula area, Riverside County, California: in Pipkin, B. W., and Proctor, R. J., Engineering geology practice in southern California: Association of Engineering Geologists, Southern California Section, Special Publication No. 4, Star Publishing Company (Belmont, California), p. 275-288.

Shlemon, R. J., and Hakakian, M., 1992, Fissures produced both by groundwater rise and groundwater fall: a geological paradox in the Temecula-Murrieta area, southwestern Riverside County, California: in Stout, M. L. (ed.), Proceedings of the 35th Annual Meeting, Association of Engineering Geologists (Long Beach, California), p. 143-150.

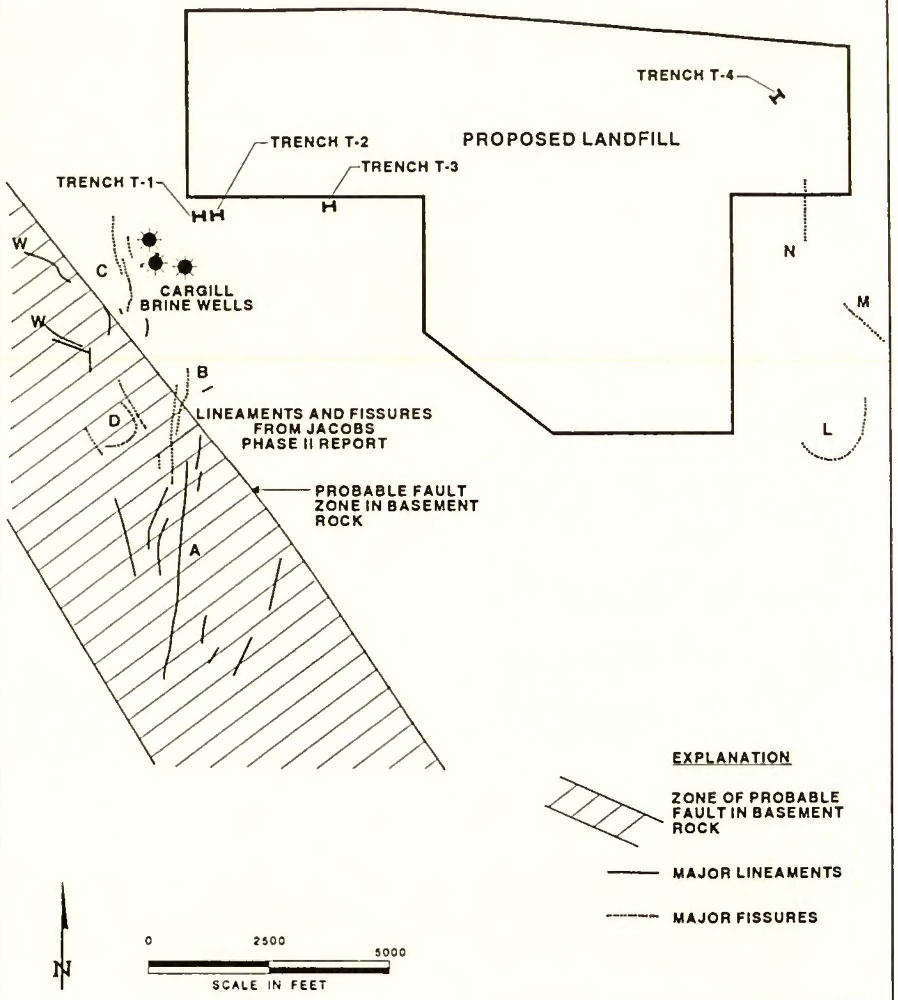
Slaff, S., 1990, Bibliography on Arizona earth fissures and related subsidence, with selected references for other areas: Arizona Geological Survey Open-File Report 90-7, 28 p.

Swadley, W. C., and Scott, R. B., 1988, Modern fissures in the Pahranagat shear system, northeastern Nevada: EOS, v. 69, no. 44, p. 1459.

Verbeek, E. R., Ratzlaff, K. W., and Clanton, U. S., 1979, Faults in parts of north-central and western Houston metropolitan area, Texas: U. S. Geological Survey Miscellaneous Field Studies Map MF-1136, scale 1:24,000.

Werle, J. L., and Stilley, A. N., 1991, Effects of ground fissures on development in the Las Vegas Valley, Nevada: Proceedings of the 27th Symposium on Engineering Geology & Geotechnical Engineering, Utah State University (Logan, Utah), p. 32-1 - 32-15.

Zellmer, J. T., Roquemore, G. R., and Blackerby, B. A., 1985, Modern tectonic cracking near the Garlock fault, California: Geological Society of America Bulletin, v. 96, p. 1037-1042.



ADAPTED FROM: JACOBS ENGINEERING GROUP
PHASE II REPORT, DECEMBER 1991, PLATE 4-1
DRAFT EIR/EIS SUPPLEMENT, FIGURE 4.1.1

BRINE WELLS FROM U.S.G.S. AMBOY 7½ MINUTE QUADRANGLE, 1985.

LOCATION OF TRENCHES, FISSURES, LINEAMENTS, AND BRINE WELLS

FIGURE 1

DOCUMENT S-21
ROY J. SHLEMON
RESPONSE TO COMMENTS

Response S-21-1

1. Information supporting the findings of the Draft EIR/EIS and Supplement regarding Lineament A is included in a report by Gary S. Rasmussen & Associates (Rasmussen, 1994) included in Appendix D of this Final EIR/EIS. The report is based on the review of existing documents and air photographs, and a site visit with the County Geologist, Environmental Solutions, Inc., and Rail•Cycle. As stated in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, and as supported by Rasmussen's recent investigation, Lineament A is not likely of tectonic origin, nor is it expected to trend toward the landfill. A mitigation measure has been included in this Final EIR/EIS (see Table S.2) for excavation logging by a Certified Engineering Geologist during landfill development to confirm the absence of such fissures onsite or provide data for appropriate design changes, should fissures be revealed.

Response S-21-2

1. In addition to Lineament A, other fissures south of the site have been evaluated. The origin of these fissures is most likely geotechnical rather than tectonic. The trend of the fissures changes from north-south to north-northwest (moving away from the site) about one-half mile south of the southwest corner of the Project. As noted in Response S-21-1, a mitigation measure has been included in this Final EIR/EIS for excavation logging during landfill development to confirm the absence of such fissures onsite or provide data for appropriate design changes, should fissures be revealed.

Response S-21-3

1. Cumulative data supports that the fissures are not earthquake induced, do not extend onto the landfill site and would not have significant impact to landfill development. Jacobs engineering performed an analysis of fissures in the site vicinity (Jacobs, 1991b). Each fissure observed on aerial photographs or during ground reconnaissance was evaluated and assigned a likely source. Only one feature, Lineament A, was considered as possibly fault related. Further study and evaluation has demonstrated that Lineament A is not a Holocene fault and likely not fault related (Rasmussen, 1994).

Response S-21-4

1. Active faults are not present at or near the site; thus, it is unlikely that the fissures near the site have developed as a result of aseismic creep.

Response S-21-5

1. As discussed in Section 4.2 of the Draft EIR/EIS, the site-specific seismic analysis indicates the greatest peak acceleration at the Project from MPE would be 0.09g (Jacobs, 1991b). This degree of energy is too low for ground fissures to develop. Thus, the fissures south of the project site would not be due to earthquake-induced ground failure.

Response S-21-6

1. There are several possible origins of fissures. Based on site reconnaissance, it has been determined that these features are likely related to subsidence due to ground water level lowering caused by climatic and environmental changes through geologic time, local ground water withdrawal, or geotechnical conditions other than faulting (Rasmussen, 1994). The majority of the primary fissures also trend away from the site (to the northwest) beginning about one-half mile south of the site.

2. As required by the SWRCB and County, the logging of landfill cell excavations would provide assurances that the fissures do not extend into the site. This logging would provide data beyond the precision of geophysical surveying to enable refined assessment of geological discontinuities, if any, and allow landfill design modifications, if necessary. Design refinements as the result of geotechnical evaluation during construction are standard during landfill development.

Response S-21-7

1. As discussed in Response S-21-3, the likely origin of various fissures has been addressed by site investigation (Jacobs, 1991b; Rasmussen, 1994).

Response S-21-8

1. Although not expected based on the available data, should fissures be encountered onsite during excavation, their cause of development would be established, if necessary, and appropriate design changes would be engineered and implemented. Refer to Response S-21-6.

Response S-21-9

1. Site conditions do not indicate the potential for hydrocollapse. Should such conditions be encountered during excavation, engineered solutions would be implemented.

Response S-21-10

1. Although not expected, based on the available data, should fissures be encountered onsite during excavation, their cause of development would be established, if necessary, and appropriate design changes would be engineered and implemented.

2. Also see Response S-21-6.

Response S-21-11

1. Desiccation of near-surface clay is not expected. In addition, if near-surface clay is present, excavation for the landfill cells would remove the material. Landfilling would provide a buffer to prevent significant moisture change of subsurface soils in the future.

2. Also see Response S-21-6.

Response S-21-12

1. The geotechnical studies for the EIR/EIS have been extensive. A complete listing of the various reports and references used to characterize the geologic and seismic conditions in the project region is included in Table E.1, Appendix E of this Final EIR/EIS. Data from the various reports and references has been assembled, evaluated and reviewed to form the basis of findings and mitigation measures presented in the EIR/EIS.

2. There is no direct evidence that fissures extend beneath the Bolo Station site. As referenced by Morris Balderman (see Document S-20), the SWRCB geologist recommended requiring that excavations for new or expanded waste disposal be logged under direction of a Certified Engineering Geologist. However, in the same letter from the SWRCB that recommended logging of the waste cells, it was stated that, "...the geophysical and trench work conducted to date appears to be adequate for the intended purpose" (SWRCB, 1993).

3. A mitigation to log the excavations as required by the SWRCB and the County has been included in this Final EIR/EIS (see Table S.2). This is standard construction procedure for landfill development. If evidence of fissures which could impact the landfill are observed, appropriate design changes would be implemented.

544-94

S-22

E. DOUGLAS SCHWANTES, JR.
Consulting Geotechnical Engineer and Associates
16861 Edgewater Lane
Huntington Beach, CA 92649-3006
(714) 846-2602

February 18, 1994

County of San Bernardino
Planning Department
385 N. Arrowhead Ave.
San Bernardino, CA 92415-0182
Attn: Mr. Randy Scott

Bureau of Land Management
California Desert District
6221 Box Springs Blvd.
Riverside, CA 92507-0714
Attn: Mr. Doug Romoli

SUBJECT: Geotechnical Review of Reported Conditions
Proposed Rail-Cycle Bolo Station Landfill
San Bernardino County, California

Gentlemen:

Attached is my preliminary review of documents, that report the geotechnical site conditions as determined by consultants for the Rail-Cycle project referenced above. The report summarizes my findings and conclusions regarding the likely performance of the proposed landfill over time and its potential effect or effects on the existing Cargill well field. This evaluation and report were prepared for and at the request of the Cargill Salt Company.

As detailed in the report, my "bottom line" conclusion is that the geotechnical work completed to date for Rail-Cycle is not complete enough to support a full EIR/EIS, because some of their conclusions, data, and assumptions appear to be flawed. To upgrade the current level of site information and design parameters to the level needed for a sound EIR/EIS, considerable work is needed. My report suggests items of work, that could help resolve some of the present questions and concerns, which arose during my review of Rail-Cycle documents.

Very truly yours,

E Douglas Schwantes Jr.

E. Douglas Schwantes, Jr.
R.C.E. 25,493 G.E. 757

Registered Professional Engineer: California • Illinois • Washington

---

S-22

GEOTECHNICAL REVIEW OF REPORTED SITE CONDITIONS PROPOSED RAIL-CYCLE BOLO STATION LANDFILL SAN BERNARDINO COUNTY, CALIFORNIA

INTRODUCTION

This report presents the preliminary results of my engineering review of documents (see Attachment A - Rail-Cycle Documents Reviewed) prepared by the design consultants for Rail-Cycle's proposed Bolo Station Landfill. The documents reviewed were supplied by representatives of Cargill Salt. It is my understanding, that these documents are the most current and representative of the present stage of design..

SUMMARY OF CONCLUSIONS

In my opinion, the geotechnical work completed to date contains conclusions and assumptions that are flawed. To upgrade the site information to the level needed for a sound EIR/EIS, considerable work is needed, as suggested in this report. In addition, there are several potential events, which could negatively impact the future production from Cargill's brine wells should the proposed LANDFILL be built as presently designed:

1) Large differential settlements could rupture the LANDFILL lining, causing unknown quantities of leachate to seep into the ground and ultimately into the underlying aquifers..

2) Massive slope failures could also rupture the base liner, as above, or could result in an uncontrolled release of refuse to the local environment, that would be difficult to cleanup and repair.

3) The application of large LANDFILL loads have the potential for compressing the underlying brine aquifers, which would cause a reduction in well capacity. No tests or studies have been made to date to evaluate this potential impact on Cargill.

4) To address the above items and achieve acceptable factors of safety and tolerable levels of settlement, it may become necessary to design flatter slopes and reduce the LANDFILL weight by lowering the top-of-fill elevation. The potential loss of fill volume could make a significant impact on the overall design concept for the Bolo Station site.

SCOPE OF WORK

The scope of my geotechnical evaluation of the the proposed LANDFILL was to:

1) Review furnished documents for both general background information and specific design data.

2) Evaluate furnished data and results of studies to determine, if they appear to be reasonable, and if they accurately represent the site and project conditions.

3) Where design parameters were questionable or missing, develop appropriate values from experience or published literature.

4) Analyze settlement estimates of the proposed LANDFILL based on my interpretation of the loads and site consolidation characteristics.

5) Run a series of slope stability analyses to independently determine the factor of safety of the proposed 3:1 fill slopes.

6) Based on the above, make an evaluation of the various findings and develop conclusions concerning the likely performance of the LANDFILL , and

7) Prepare a report summarizing my findings and conclusions.

PROJECT DESCRIPTION

The proposed Bolo Station Landfill (LANDFILL) will cover an estimated 2,100 acres with refuse fill, which will impose a net load increase of at least 15,000 psf (Rail-Cycle estimate). The total height of refuse fill will approach 400 ft in the center. The side slopes will rise approximately 350 ft above the adjacent natural ground surface at a design inclination of 3:1 (horizontal : vertical). The refuse will be confined within a liner system, which will use both natural and synthetic materials. It is estimated that it will take up to 100 years to fill the site to the design elevations. Subsequent to filling, the site is to be maintained by Rail-Cycle for an additional 30 years

DETAILED FINDINGS and CONCLUSIONS

In my opinion, the geotechnical reports and data presented to date for my review constitute a minimal evaluation, which is only complete enough to help identify the on- going scope of work, that should be done to fully evaluate the site for such a large, long-term project. The following paragraphs present a series of general findings and conclusions, which are followed by specific conclusions regarding limitations of the settlement and slope stability studies completed to date. In each case, suggestions are made regarding how or what is needed to strengthen the present level of site knowledge.

General - It is a common misconception of large corporate developers, that projects, such as the proposed Bolo Station Landfill, can be built with minimal design input, because they are to located on barren desert land with few existing cultural features. As a result, such developers tend to prematurely proceed into final design with a level of site knowledge, which even they would acknowledge to be inadequate, were the site located adjacent to an urban area. The following general comments are intended to point out some of the short-comings and voids in the existing data base:

① 1) Minimal Study - Considering that the ultimate LANDFILL is to cover some 2,100 acres (approximately 3.25 square miles) with a net areal load in excess of 15,000 psf, the geotechnical studies to evaluate the site and future performance have been minimal and not EIR/EIS level studies. Though there has been one, 504-foot boring drilled, most of the recent drilling has been to install numerous, relatively shallow "monitoring wells", which in reality are an early part of final construction and facility monitoring, rather than design studies.

② 2) Soil Profile Definition - The soil profile is incomplete. Rail-Cycle's consultants have developed their model of the site conditions, which is based on the logging of widely-spaced, relatively-shallow borings. However, much of the profile is based on assumptions, which have not been verified in the field. Until the assumptions have been verified with a reasonable amount of field testing, any analytical study based on the assumed profile should be considered to be incomplete.

Though the depth to the underlying bedrock is fairly large (estimated 900 to 2,250 ft), this depth is relatively small with respect to the surface of the LANDFILL, who's minimum dimension is measured in miles. Since the design loads are to be high (>15,000 psf), detailed knowledge of the full soil profile is needed to make any attempt at estimating future settlement, either from the LANDFILL or from groundwater drawdown. A minimum of three borings should be drilled and sampled to bedrock.

③ 3) Site Exploration - The southwestern half of the LANDFILL site has been explored by a series of widely spaced, relatively shallow borings. In general, the borings are spaced no closer than about 1,000 to 2,000 ft and range in depth from about 100 to 200 ft. The one known exception is a single 504-ft boring, from which four, widely spaced Shelby tube samples were obtained. Since all other soil sampling

S-22

was accomplished with relatively thick-wall samplers, which were driven with relatively light weight (140 lb) hammers, the four Shelby tubes represent the only true attempt to obtain "undisturbed" samples.

③ CONT.

In spite of the large, 2,100-acre footprint and high net loads, no borings were extended through the entire sequence of site sediments to the underlying bedrock. The depth to the top of bedrock across the site was estimated by Rail-Cycle's geophysical consultant to range from about 2,250 ft (SW corner Section 17 near Cargill's brine wells) to about 900 ft (NE corner Section 17). This change in depth-to-bedrock of 1,300 ft over a distance of approximately 1.4 miles is large and poses a potential for large differential settlement across the LANDFILL site.

④

4) Depth and Spacing of Explorations - The depth of existing borings clearly is not great enough to define the soil profile for engineering purposes. In addition, lacking the presence of identifiable marker beds, which extend from boring to boring, the spacing of borings to develop geologic cross sections is too great (1,000 to 2,000 ft or more). Without more detailed data, both with depth and laterally, one can not verify their basic assumption, that there are no significant discontinuities in the soil profile. Such site discontinuities, if present, could result in sharp settlement anomalies, which could compromise the integrity of the lining system.

⑤

5) Soil Sampling (Quantity and Quality) - The number of high-quality, undisturbed soil samples is totally inadequate to define the engineering properties of this huge site. As best I can tell, only four samples have been recovered, which can reasonably be called "undisturbed" and those were all obtained in boring BLM-1. All other samples have been obtained in relatively thick-wall samplers of various diameters, that were advanced by driving with a 140 lb. drop hammer. While such samples are good for index testing, their unknown level of disturbance should limit their usefulness for other types of testing.

In addition, many of the borings were drilled using a percussion drill, which rapidly advances a steel casing, much like a pile driver does. Especially when drilling in sandy soils, the percussion drill tends to compact the soils several feet below the bottom of casing, such that any soil samples obtained within that zone of densification are likely to have: higher blow counts, higher shear strengths and a lower potential for consolidation when tested. Therefore, such results will not be representative of the in situ conditions.

To better sample and test the subsurface soils, it would be prudent to make greater use of rotary-wash drilling techniques and more frequent Pitcher barrel sampling, as used in drilling BLM-1. In addition, the use of electric cone penetrometers (CPTs) is a fast and economical means of developing very detailed soil profiles to depths of 150 ft or more.

⑥

6) Laboratory Testing (completed to date) Most of the laboratory testing completed to date has been run on drive samples, which are likely to have a significantly higher degree of sample disturbance, than samples obtained in thin-wall, Shelby tubes. Laboratory testing of soil samples from the various borings ranged from

---

S-22

⑥ CONT.

standard index tests, which are used to classify both disturbed and undisturbed soil samples, and more sophisticated tests to evaluate the compressibility, permeability, and shear strength of soils. Unless one is evaluating the properties of remolded soils, such sophisticated tests generally would be run only on the highest quality, undisturbed samples. Considering the magnitude of this proposed project, one should be suspect of test results, other than standard index tests, that are run on drive samples, that are likely to have some unknown degree of sampling disturbance.

To date, only four Shelby tube samples have been obtained, which represents a very small amount of "undisturbed" sampling. However, in an attempt to compensate for this shortcoming, Rail-Cycle's consultants ran three or four series of tests on each sample from the 504-ft boring (BLM-1). This is neither good nor standard practice.

⑦

7) Incomplete Laboratory Testing (no data to date) - During this evaluation I found no indication that any research or testing was accomplished to determine realistic design parameters for the following materials:

- o No tests were run to determine the unit weight and shear strength parameters for compacted refuse materials. Rail-Cycle's assumed unit weight of 55 pcf may be unconservatively low for use in both slope stability and settlement studies.
- o No realistic compressibility studies were run on the loose to medium dense sandy soils, which will directly underlie the fill with its load of >15,000 psf.
- o No tests have been run to evaluate the permeability of the deep brine aquifers and how this might change with application of the LANDFILL load.
- o Shear strength parameters are presented in various documents, which represent the properties of various geotextiles and synthetic liners. However, no laboratory test data, by Rail-Cycle or others, was presented.

⑧

8) Site Soils Will Compress - There are great depths of compressible soil beneath the LANDFILL site. Though there is a lack of a sufficient number of undisturbed samples, the index tests on other samples indicate that a majority of the clayey samples are: low density (75 to 95 pcf), high moisture content (25 to 45%), and normally consolidated. Little data is available regarding the the compressibility of the sands, but under the load of >15,000 psf, they, as well as the clays, will compress.

⑨

Limitations of Settlement Estimates - In my opinion, both the available data and assumptions used in making Rail-Cycle's settlement estimates are weak. Settlement estimates are only as good as the data and/or assumptions upon which they are based. Rail-Cycle thus far has presented two sets of settlement calculations. Since these were based largely on estimates, assumptions, and small amounts of test data, it is not surprising that the range of predicted settlements resulting from the

S-22

weight of the LANDFILL is large (4.5 to 14 ft). In my opinion, both numbers are probably wrong, because there is not enough hard information on the soil profile and its consolidation characteristics.

The potential for sharp differential settlements, which could damage the liner system, is still unknown at this time. To better evaluate this potential hazard, one must more clearly define the soil profile both with depth and laterally. Clearly, more good-quality data is needed before realistic settlement estimates can be made. For example, if we assume an average unit weight of 75 pcf and maintain the same height of refuse, the weight of the refuse fill will increase about 40% from around 15,000 psf to over 21,000 psf. As a result, all settlement estimates will increase significantly. ⑨ CONT.

The Rail-Cycle design consultants have made settlement predictions, which consider both the weight of the LANDFILL and the drawdown of the water table as a result of long-term pumping by Cargill and others. It is correct to consider both of these causes of surface subsidence, but a number of their input assumptions have serious limitations or may be in error:

1) The assumed unit weight of the refuse (55 pcf) is likely to be low. Laboratory and in situ test data from other landfill projects in California (Refs. 1, 2, 3) suggest that the unit weight will range up to 81 pcf. In addition, the unit weight is not constant with depth, as assumed by Rail-Cycle. Rather, as the refuse consolidates with time and increased overburden pressure, the unit weight increases. One recent technical paper (Ref. 3) suggests, that the design unit weight of refuse should be increased linearly from 70 pcf at the top of the fill to 81 pcf at a depth of 200 ft and continue uniformly at 81 pcf below the 200 ft depth. ⑩

2) Both of the simplified settlement analyses run by Rail-Cycle assume that the soil profile is divided into two major categories: clays and sands. This is a gross over simplification, because in reality, there is significant interbedding and mixtures with silt, which are likely to be miscatagorized. They also assume that only the clays will compress under the high LANDFILL loads. These assumptions are unconservative at this time, because the full soil profile has not been determined (no borings to bedrock to define the relative percentages of clay and sand and no evaluation of the compressibility of loose sands). They have also assumed that the LANDFILL site becomes sandier toward the north. This may be true in the upper 100 to 200 feet of the profile, but there have been no borings drilled below that depth to define the soil profile in the northern portion of the site. ⑪

3) Their most recent evaluation of soil preconsolidation is flawed. The geologic and loading history of the site and inspection of Rail-Cycle's boring logs and consolidation test results from the 504-ft boring (BLM-1) indicate: ⑫

- The soils above the water table are normally or slightly overconsolidated, as reported by Rail-Cycle.

S-22

- The soils below the water table are saturated and normally consolidated, which is what Rail-Cycle's consultants originally said. Their more recent interpretation, that these soils are heavily overconsolidated, is wrong. My inspection of their data indicates, that at the present overburden pressure, the soil samples are compressing along the virgin portion of the consolidation curve. In addition, the dry density of the clayey samples from the 182 and 324-ft depths are only 86.5 and 89.7 pcf respectively and have average moisture contents of 32 percent. Such numbers (low density, high moisture) represent typical values for normally consolidated, saturated clays. ⑫ CONT.

4) Stress changes in the underlying soils as a result of groundwater drawdown are relatively small, when compared to the planned LANDFILL loads. Piezometer data from Rail-Cycle monitoring wells confirms that the groundwater gradient across the site is quite uniform until it gets to within about 1,000 ft of Cargill's existing brine wells. Since the rate of drawdown and any subsequent consolidation is very slow, its potential impact on the LANDFILL will be to cause a broad, gentle down-warping of the LANDFILL site, which will be largely lost from view when combined with the much greater settlement caused by the LANDFILL. ⑬

Slope Stability Evaluation - The slope stability studies that have been run to date are incomplete. In March 1993 Rail-Cycle's consultants ran a series of slope stability calculations to demonstrate that the 3:1 design slopes, cover system, and downdrains will be stable under both static and dynamic (earthquake) conditions. As subsequently discussed, their analyses to date are incomplete, because they are based in part on unverified assumptions, unconservative parameters, and by totally ignoring the strength of the refuse in all of their calculations:

1) Only wedge-type failures along the liner interface were considered. It is correct that these should be considered, but so should other failure conditions, such as: circular or wedge failures through the refuse. ⑭

2) Design parameters for the refuse fill materials are either in question (unit weight) or totally ignored (shear strength). The unit weight of refuse used for these studies (55 pcf) is probably too low, as discussed previously in Settlement Analyses. A more realistic value in the range of 60 to 80 pcf should have been used, except in the near surface, where 55 to 60 pcf might be appropriate. These parameters are difficult values to determine, but to design a 350-ft refuse slope, it has to be done. Other projects have done it.

Based on a very limited review of the available literature (Refs. 1, 2, 3, 4, 5) and personal communication with other consultants, a wide range of shear strength parameters for refuse has been used by others. Unless justified by realistic testing, it would be prudent to use conservative, lower-bound values such as: ⑮

S-22

Moist unit weight	70 to 80 pcf
Friction angle	20 degrees
Cohesion	100 to 200 psf

⑮ CONT.

⑯ 3) The shear strength parameters of the synthetic liner materials need to be documented prior to acceptance of slope stability results. Tests by others (Refs. 4,5) have found friction angles for smooth bottom liners as low as 8 degrees, which is significantly lower than the 12 degrees used in some of Rail-Cycles calculations.

⑰ 4) Seismologists from the California Division of Mines and Geology (Ref. 6) have estimated that the intensity of the June 28, 1992 Landers Earthquake at Amboy (approximately 42 miles east-northeast of the epicenter) was a Modified Mercalli VI. Considering this recent, nearby event, the selection of 0.05g for the pseudo-static and permanent displacement analyses seems low. A more appropriate value is likely to be in the range of 0.1g to 0.15g. This parameter should be reevaluated in light of recent events.

⑱ 5) For most engineering projects, where the site and structural conditions are reasonably well known, a factor of safety of 1.5 is considered an acceptable minimum. However, for this project, where the knowledge of refuse parameters and seismic response is weak, it would be prudent engineering to go beyond the normal minimum values, because of the environmental risk and high cost of repairs. One would not want the final slopes to fail at any time.

As an independent check, I ran a series of circular and wedge type analyses using assumed refuse parameters (55 pcf, 20 deg, 200 psf) and Rail-Cycle's friction angle of 12 degrees along the base liner. For the psuedo-static runs, I assumed seismic coefficients of: 0.05g, 0.1g, and 0.15g. The results were as follows:

Circular: F.S. = 1.33 (static); = 1.14 (w/ 0.05g); = 0.99 (w/ 0.1g); = 0.88 (w/ 0.15g)

Wedge: F.S. = 1.50 (static); = 1.23 (w/ 0.05g); = 1.03 (w/ 0.1g); = 0.88 (w/ 0.15g)

Based on the parameters used, the most critical failure circle was one that started from the top of fill and exited the refuse fill at the toe of slope. The minimum factor of safety obtained (F.S.= 1.33 static) is well below the generally accepted value of 1.50. In addition, when a seismic coefficient of only 0.1g was used, the slopes are at the point of failure according to the calculations.

3.4-125

S-22

REFERENCES

1) "Geotechnology of Waste Management", I. Oweis and R. Khers, Butterworths, date unknown

2) "Geotechnical Materials Report", Acme Landfill, Martinez, California, 1978

3) "Stability of High Refuse Slopes on Synthetic Lining Systems at the Bee Canyon Landfill", S. Somasundaram and K. Khilnani, Geosynthetics '91 Conference, Atlanta

4a) "Kettleman Hills Waste Landfill Slope Failure, I : Liner-System Properties"
4b) " , II : Stability Analyses",
J.K.Mitchell, R.B.Seed, and H.B.Seed, A.S.C.E. Journ. Geotechnical Engineering, Vol. 116, No. 4, April 1990

5) "Smooth HDPE-Clay Liner Interface Shear Strengths : Compaction Effects", R.B.Seed and R.W.Boulanger, A.S.C.E. Journ. Geotechnical Engineering, Vol. 117, No. 4, April 1991

6) "California Geology", Division of Mines & Geology, January/February 1993

S-22

Attachment A

RAIL-CYCLE DOCUMENTS REVIEWED

Dec. 1991	- Phase II, Geologic, Hydrogeologic and Geotechnical Site Characterization Study, Bolo Station Facilities
Dec. 1992	- Groundwater Monitoring Well Installation Report, Bolo Station Facilities, Jacobs Engineering Group Inc.
Mar. 1993	- Stability Analyses, Bolo Station Landfill, SECDonohue
Mar. 1993	- Logs of additional borings: BH-1, BH-2, & BH-3, Jacobs Engineering Group Inc.
May 13, 1993	- Project Note No. 94, Jacobs Engineering Group Inc., re: settlement estimates
Oct. 7, 1993	- Hydrogeological and Geotechnical Assessment, 500-Foot Borehole, Bolo Station Landfill, Rust Environmental
Oct. 8, 1993	- Technical Report, Response to BLM Inquiries Regarding Settlement Calculations for Bolo Station Landfill
Oct. 18,1993	- Technical Report, Response to Concerns of Cargill Salt Company, Regarding Its Water Wells Near Bolo Station Landfill

DOCUMENT S-22
E. DOUGLAS SCHWANTES, JR.
CONSULTING GEOTECHNICAL ENGINEER AND ASSOCIATE
RESPONSE TO COMMENTS

Response S-22-1

1. The geotechnical studies for the EIR/EIS have been extensive. A complete listing of the various reports and references used to characterize the geologic and seismic conditions in the project region is included in Table E.1, Appendix E of this Final EIR/EIS. Data from the various reports and references has been assembled, evaluated and reviewed to form the basis of findings and mitigation measures presented in the EIR/EIS.

2. The issues raised by this commenter on the data in the EIR/EIS reflect a disagreement among experts. Pursuant to CEQA, disagreement among experts does not make an EIR inadequate (Section 15151 of CEQA Guidelines). A primary purpose of the Supplement was to further evaluate issues as raised by other technical experts. Moreover, additional information and clarification is provided in this Final EIR/EIS to disclose and summarize differing expert opinions.

Response S-22-2

1. A maximum loading of 15,000 pounds per square foot (psf) has been calculated for the proposed landfill and used for preparation of excavation plans for the proposed project. Many portions of the landfill subsurface would be subjected to much lower net loading. The evidence from borings indicate subsurface soils to be "normally consolidated" to "over-consolidated." The landfill net loading would be distributed with depth and would not cause significant stresses or deformations to soils below approximately 100 feet. Therefore, there is no need to drill borings to 1,000 foot depths to bedrock.

Response S-22-3

1. Two additional borings drilled in 1993 to a depth of 355 feet (PELA, 1994) support the data and findings from the earlier boring, and the conclusion of the Draft EIR/EIS and Supplement. As discussed in Response S-22-2 there is no need for borings to extend to bedrock.

Response S-22-4

1. Boring depths (i.e., typically greater than 100 feet and up to 504 feet) are more than adequate to evaluate the zone of influence of the net loading of the proposed landfill.

Response S-22-5

1. Conventional geotechnical practice utilizes a 2.5-inch diameter drive sampler and/or Standard Penetration Test (SPT) split-spoon sampler to obtain soil samples (unless the soil is highly sensitive or will not recover in the sampler) for laboratory testing of index properties, shear strength, compaction, consolidation and permeability characteristic. Jacobs performed a large number of these tests at the proposed site.

Response S-22-6

1. Shelby tube samples are often difficult to obtain in dry, sandy desert soils. The sandy material tends to fall out during extraction of the sampler. The sample methods used by Jacobs and subsequent test results are standard geotechnical practice.

Response S-22-7

1. Data from literature for actual municipal solid waste landfill sites is available for compacted waste materials and is sufficiently representative for the proposed project (e.g., Huitric, 1981). Laboratory or field simulations to obtain similar data are not justified and do not always account for the variety of conditions which may be encountered over time at an actual landfill site. Consolidation parameters were conservatively selected from a range of results for various soil samples tested. Landfill loads would not subject soils at the depth of brine extraction, to stresses and deformation, significant enough to effectively change the permeability characteristics of the soils.

2. Shear strength parameters for conventional geotextiles and synthetic liners have been established through many years of testing by the manufacturers, independent laboratories, and government agencies.

Response S-22-8

1. Although most of the proposed site is underlain by less compressible silts, silty-sands and silt/sand clay mixtures, the analysis by Jacobs conservatively assumed compressible clayey soils located beneath the landfill (Jacobs, 1993b). Detailed and conservative settlement analyses performed by Jacobs demonstrated ranges of

settlement which would not damage flexible landfill control systems (i.e., FMLs, landfill gas collection pipes, and leachate collection pipes).

Response S-22-9

1. The commenter does not indicate what specifically is incorrect in the settlement analysis by Jacobs. Earthen materials are subject to variability and the range of settlements (i.e., from 4.5 to 15.6 feet) account for these variabilities, as well as loading variation and ground water lowering at the site.

2. Depending on site-specific conditions, sharp differential settlements could result from differences in loading, abrupt subsurface soil/condition changes, abrupt differences in ground water drawdown, or a combination of these factors. However, as discussed in the Draft EIR/EIS and the reports by Jacobs and Rust (Jacobs 1991b, Rust 1993c), such site-specific conditions do not exist at the proposed site. Landfill loading would be transitional. Subsurface soil transitions beneath the site are not abrupt and ground water withdrawal presents a gently sloping drawdown surface.

Response S-22-10

1. Compacted waste material density can vary significantly from site to site depending upon moisture conditions, compaction procedures and equipment, and waste components. Published data shows a range of compaction from 40 pcf to 85 pcf (Huitric, 1981). WMNA experience yields an average value of approximately 55 pcf, which is representative of their other landfills and, methods and equipment used for placement and compaction of waste.

2. Densification of waste over time is primarily due to decomposition and conversion to landfill gas. Therefore, unless additional waste is placed on top of the existing waste column, no additional weight or load would be placed on subsurface soils. In addition, shallow subsurface soils increase in strength and decrease in compressibility as they are progressively consolidated.

Response S-22-11

1. Interbedding is likely in subsurface soils beneath the site and will tend to normalize or average out the compressibility of the loaded soil profile. As discussed in Response S-22-2, borings below the depth of influence of the applied loads, which are typically less than 100 feet, would not be beneficial.

Response S-22-12

1. As noted in Section 5.1 of the Supplement, Rail•Cycle elected to assume "normally consolidated" soil conditions for the settlement analysis as a conservative basis for design, even though there is sufficient data for the site indicating that soils are "over-consolidated."

Response S-22-13

1. As discussed in Section 5.1 of the Supplement, the settlement analysis conducted for the proposed project included both ground water drawdown related settlement, and settlement caused by soil loading caused by the waste column.

Response S-22-14

1. The analysis referred to, and subsequent stability analyses performed for the RDSI, are conservative and well documented (Rust, 1993d). Multiple types of failure and failure surfaces were considered. Rail•Cycle's design is based on the most conservative of these analyses.

Response S-22-15

1. Considerable evidence exists to support using waste shear strength parameters of closer to c (cohesion) = 100 to 200 psf and ø (internal angle of friction) = 30 to 32 degrees. Also, there are no known reported cases of major landfill slope failures occurring along shear planes through the waste. In contrast, many California landfills report that deep excavations in the waste, will stand vertical for long periods of time.

Response S-22-16

1. The review and acceptance of the stability analysis report are part of the permitting responsibility of CIWMB and RWQCB. The friction angle of 12 degrees is representative of values reported in the literature.

Response S-22-17

1. The Draft EIR/EIS (Section 4.2) indicates the Ludlow Fault could generate 0.09g and 0.20g at the site during MPE and MCE events, respectively. Stability analyses performed for the proposed landfill used a peak ground acceleration

of 0.35g and found no instabilities or potential liner damage (Rust, 1993d).

Response S-22-18

1. Relevant and specific analysis performed by Rust show adequate factor of safety and acceptable deformation under a MCE peak ground acceleration of 0.35g (Rust, 1993d).

February 18, 1994

County of San Bernardino
Planning Department
385 North Arrowhead Avenue
San Bernardino, CA 92415
Attn.: Mr. Randy Scott

Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, CA 92507
Attn.: Mr. Doug Romoli

Adequacy Evaluation
Proposed Groundwater Monitoring Program
Rail-Cycle Bolo Station Landfill
San Bernardino County, California

Gentlemen:

The attached report describes an evaluation of the adequacy of the groundwater monitoring program proposed at the Rail-Cycle Landfill. Information for the evaluation was obtained from Cargill Salt Company and their consultants. All information used in generating this report has been referenced in public documents concerning the project. This evaluation was performed for the Cargill Salt Company.

An advective groundwater transport model was constructed for the site. Based on the results of simulations using that model, the proposed groundwater monitoring system will be inadequate for detection of leachate migration of landfill leaks to the Cargill brine extraction wells. The simulations also indicate that for as long as the Cargill brine wells are operational, any and all leaks from the landfill that reach the groundwater system will move toward the brine extraction wells and will be discharged into the brine processing system.

Additionally, there is concern that the vadose zone monitoring proposed for the site will be ineffective in detecting leaks from the system. Similar systems installed beneath mine tailings facilities in Nevada have performed poorly due to interference from highly saline conditions in the soil and the water. The sodium chloride interferes with the probes generating a high percentage of both false positives and negatives.

Respectfully submitted,

Frank J Hagar
Frank J. Hagar

CARGILL SALT
RAIL-CYCLE BOLO STATION LANDFILL - ADVECTIVE TRANSPORT MODEL SIMULATION

EXECUTIVE SUMMARY

A three dimensional, steady state advective transport model was constructed to evaluate if potential leakage from the proposed Rail-Cycle Landfill could reach the Cargill brine extraction wells without being detected by the proposed ground water monitoring system. The evaluation indicates that since there are no monitoring wells along flow paths between the sedimentation basin and the leachate pond, leakage from those areas could reach the brine extraction wells without detection. From the advective transport simulation, approximately 1% of the particles generated by leaks in the southwest corner of the landfill intersect the capture zone of a monitoring well. The remaining 99% of the particles flow through to the Cargill wells undetected. Similarly, only 15% of the particles generated from leaks at a north central location of the landfill were captured by a monitoring well, allowing the other 85% to reach the Cargill extraction wells undetected.

1.0 INTRODUCTION

The following discussion summarizes results of simulations of advective flow with subsequent generation of particle paths that might be observed within the aquifer system beneath the proposed Rail-Cycle Landfill. The flow paths describe leachate migration patterns that might be expected within the saturated zone beneath the landfill should a leak occur in the landfill liner system.

The primary goal of the modeling effort was to consider the effectiveness of the proposed the proposed Rail-Cycle Landfill monitoring well network in detecting potential leachate leaks that could impact the Cargill Salt brine extraction wells.

The groundwater simulation was conducted using the U. S. Geological Survey finite difference model MODFLOW (McDonald, M.G. , Harbaugh, A. W., 1988). The particle tracking evaluation was conducted using the MODPATH package (Pollack, 1989). MODPATH is a post processor package that uses data generated from the MODFLOW program as input to a particle tracking algorithm.

The generated model was based on a flow model prepared by Rust Environmental and Infrastructure (1993) for evaluation of water supply adequacy. The model was expanded in size by approximately a factor of four predominately to the west and south to include the Cargill brine extraction wells. Further model calibration required modification of some of the input parameters as described below.

2.0 SUMMARY OF RESULTS

The following are observations and results of the evaluation described herein:

- Monitoring well systems are most effective in relatively passive systems where dispersion and chemical mixing of potential contaminants would move throughout the aquifer under relatively constant semi-regional hydraulic gradient. Under these conditions, there would be a relatively high probability that downgradient wells would detect leaks due to mixing and natural chemical reactions. However, this is not the situation at the proposed Rail-Cycle Landfill. The strength of the Cargill wells as a groundwater sink as both modeled and measured by the Jacobs Engineering Group causes relatively rapid development of preferential flow lines from hydrologically upgradient sources such as the landfill. Therefore, there is a very active, centered stress acting on the aquifer system. *A landfill leachate leak contaminant plume will be relatively narrow. For as long as the Cargill wells are operating, the contaminant plume will be drawn into the Cargill wells.*

- Advective modeling performed for this project indicates that ***the probability that the proposed Rail-Cycle groundwater monitoring system would detect a leak is low*** since a pathline has to intersect the capture zone of a monitoring well to be recognized. Since monitoring wells are essentially non-stressed sinks, the capture zone of the point is relatively small. The probability of detection improves with distance of the leak from the monitoring points and the size of the leak.

3.0 GROUNDWATER FLOW MODEL CONSTRUCTION

To facilitate groundwater flow model construction, the model generated by Rust Environmental and Infrastructure (1993) was used as an initial approximation for the hydrogeology at the proposed Rail-Cycle Landfill site. The model was modified as described below to include the Cargill Salt brine extraction wells and to obtain a closer fit to observed site conditions. Using the Rust model also allowed independent review of the results presented in their report.

3.1 Model Conceptualization

The proposed Rail-Cycle Landfill site is located in the Bristol Basin which is a hydrologically closed basin with internal drainage. Within this environment, groundwater elevations in upper aquifers generally slope gently from the basin margin to the center, with the depth to water decreasing toward the basin low point. The primary Bristol Basin aquifer is composed of a series of interbedded alluvial fan deposits and playa deposits that generally thicken and become finer toward the center of the basin. The Cargill brine extraction wells are located along the northeast margin of the present Bristol Dry Lake Bed.

Regionally, recharge to the upper basin fill aquifer is along the basin margins with a radial flow pattern toward the basins hydrogeologic low point. Discharge is generally through evapotranspiration in the playa area, and groundwater withdrawals. Vertical flow within the aquifer is controlled in large part by the amount of interbedding and the percent fines within the unit. In similar environments, large vertical gradients can exist due to local variations in permeability and flow. Contrary to information presented previously (Jacobs, 1991, San Bernardino County, 1993), recent water level monitoring in Rail-Cycle monitoring wells just north of the Cargill wells display a downward gradient.

In addition to normal flow gradients, density gradients are generated within the aquifer due to variations in water salinity. Including this in the simulations, although possible was beyond the scope of this project.

Locally, Jacobs Engineering Group (1991) reports that a southeasterly plunging bedrock high crosses the proposed Rail-Cycle Landfill site from northwest to southeast. Rust established a depth to bedrock map based on the Jacobs report to use in the modeling. This same configuration was used in the simulations for this investigation. Within the model grid, the depth to the bottom of the active model grid increases from the outcrop in the northwest portion of the property to 1250 feet in the southeast corner of the site. The natural groundwater gradient across the site averages .0007 ft/ft south. The gradient increases near the Cargill Salt extraction wells.

Cargill Salt operates three brine extraction wells just southwest of the proposed Rail-Cycle Landfill (Figure 1). The wells are 300 feet deep. Wells are completed from 120 feet below ground surface to the total well depth. The average aggregate pumping rate from the three wells is approximately 340 gpm. The proposed Rail-Cycle Landfill production well is located in Section 33, T5N, R13E (Figure 1). Initially, during construction, approximately 1400 gpm will be extracted from the production well for 100 days. During the remainder of the project (104 years) extraction rates will be maintained at an average of 70 gpm.

Aquifer characteristics including permeability, specific yield and storage coefficient were calculated from several aquifer tests conducted at the proposed Rail-Cycle Landfill site. Rust (1993) reports that over the site, the average permeability is approximately 11.5 ft/day (4.0E-3 cm/sec). They go on to say that the values vary widely over the site generally decreasing to the south as the material becomes finer. Review of the data as well as evaluation of recent water level changes in the Cargill brine extraction wells due to the proposed Rail-Cycle Landfill aquifer testing supports the values reported by both Jacobs (1991) and Rust (1993). However, additional data on changes in the areal distribution of aquifer permeability would be desirable. The specific yield of the aquifer is estimated from one aquifer test to be 0.17. The aquifer storage coefficient as estimated from well performance data is approximately .003.

3.2 Model Discretization

The aquifer system at the proposed Rail-Cycle Landfill was simulated using a north-south oriented, block centered, finite difference grid (Figure 1). Following the Rust model, the vertical grid consists of six layers representing a 1250 foot section of subsurface material. The horizontal grid consists of 32 rows and 23 columns with varying row and cell widths as shown on Figure 1. The MODFLOW standard of row and column numbering begins in the upper left corner of the grid. The large increase in overall model size was necessary to accommodate the pumping at the Cargill brine extraction wells while minimizing impact from model boundaries. Because of discretization and grid resolution, features shown on the grid may not correspond exactly to coordinates on the ground surface. However, the overall geometric integrity of the model is maintained.

The basement bedrock high described above was modeled in the same manner as described by Rust (1993). The six layers were stepped with internal no-flow boundaries. For lack of better information, this geometry was extended west into the extended model. Because of later knowledge that the radii of influence of all wells do not extend into this area, the lack of better knowledge for the northwest portion of the model was not detrimental to the simulation.

The upper layer of the model was defined as an unconfined unit. The lower five layers were allowed to change from confined to unconfined aquifers based on water elevations within the unit. Again, following the Rust model, constant head boundaries were assigned to all external nodes of the model.

The permeability at all nodes within all layers was initially set to 11.5 ft/day as described by Rust. The aquifer was assumed to be isotropic in all three dimensions. Therefore vertical hydraulic conductivity in all layers and grid elements was set equal to horizontal hydraulic conductivity. For transient simulations, the primary storage factor was set to 0.17 in the unconfined aquifer. Within lower units (model layer 2 - model layer 6), the primary storage factor was set to 0.003 and the secondary storage factor was set to 0.17. Initial heads were input from known groundwater elevations and estimated elsewhere by applying the average hydraulic gradient over the site to calculation of head values.

3.3 Model Calibration

During the model calibration process, the simulation results which are the values of head at a node, obtained from steady state model runs are compared to observed values. If the values are dissimilar, either input parameters such as hydraulic conductivity are modified or external stresses such as recharge or boundary conditions are modified to

bring the observed and modeled heads into better agreement. For the proposed Rail-Cycle Landfill simulation, the permeability values were modified in a manner consistent with on-site measured values. It became evident early in the sequence of steady state runs that a constant permeability distribution over the site would not support the observed drawdown at the Cargill brine extraction wells. Therefore, both horizontal and vertical permeabilities were modified to reflect the general southerly decrease in value (Figure 2).

The simulated heads agreed well with the observed heads except in areas that overlay lower layer no-flow boundaries which result from the bedrock high that crosses the site. In these areas, a three to five foot variation between observed and model calculated heads was noted. To remove this variation, additional calibration of vertical flows would have been necessary. Since little or no data exists concerning those flows, modification of those values would have been made blindly. Therefore, the slight offsets were accepted. The overall magnitude of both the drawdown in the aquifer due to flow and the advective transport solution were not affected in the tolerance range that the data would support.

After an acceptable calibration for this project was obtained, application runs were performed provide input for the MODPATH evaluation described below.

4.0 ADVECTIVE TRANSPORT MODELING

Advective transport modeling is routinely performed to assess the movement of groundwater particles due to the advective properties of the medium and the fluid in question. For the proposed Rail-Cycle Landfill, it provides a measure of the potential for Cargill Salts' brine extraction system to be impacted by leaks from the landfill and associated leachate and sedimentation ponds that would not be detected by the proposed monitoring system.

The input needed to generate particle paths consists of cell by cell water flow budget terms for each stress source. These values are generated by the MODFLOW program as described above.

4.1 Hydrogeologic Boundary Conditions

The semi-analytical method that MODPATH employs to generate pathlines requires input information regarding cell by cell fluxes as generated from the MODFLOW model. Wells become sinks within the input data set. For the purpose of the proposed Rail-Cycle Landfill simulation, all particles that encounter a sink end their movement there.

4.2 Contaminant Particle Generation

In order to generate particle paths, a source of particles is needed. For a problem where the path in the direction of groundwater flow is desired, an upgradient source is specified. The source consists of a row, column and layer designation , a relative position within a particular cell, the number of particles and optionally, the face that the particles are generated on. In attempt to simulate a landfill leak, particles are inserted into the flow system at the top of layer 2. The Rail-Cycle Landfill simulations are all forward simulations with the general purpose being to identify a sink and time to reach that sink.

5.0 MODEL RESULTS

Two types of model results were generated during this evaluation;, steady-state groundwater flow modeling and advective transport modeling. Only the final results pertinent to this evaluation are described below.

5.1 Advective Transport Model

Several MODPATH simulations were performed. Input data for the MODPATH runs were generated from the groundwater flow simulation depicted on Figure 3. Three MODPATH simulations were selected to evaluate the effectiveness of the monitoring system at Rail-Cycle Landfill. The first simulation was for a particle source located in the approximate center of the landfill (Figure 4). The second simulation included a particle source located immediately adjacent to the Cargill brine extraction system in the southwest corner of the landfill (Figure 4). The third simulation modeled flow paths from an leak from the leachate evaporation ponds locate immediately south of the southwest corner of the landfill boundary.

5.2 Monitoring Program Adequacy ①

The adequacy of the monitoring system to intercept advective flow was evaluated by establishing a large source of particles upgradient of the monitoring system at the locations described above. The particles were distributed evenly over the cell in question. Particles that passed within 10 feet of a monitoring point were considered to have been captured by that monitoring well. Of the 80,000 particles released in the north central portion of the landfill, approximately 12,100 or 15% of the points were captured by a monitoring well. Of the 80,000 points released in the southwest portion of the landfill, only 1,100 or 1% were intercepted by a well. All remaining particles follow flow paths that do not intersect the monitoring wells but end at the Cargill brine wells. Leakage from the proposed ponds on the southwest of the landfill would move toward the Cargill extraction well located in Section 20, T5N, R13E. Information provided indicates that currently there are no plans for monitoring wells along the flow paths between the ponds and wells.

6.0 LIMITATIONS

This analysis presents the results of an evaluation of advective particle transport at the the proposed Rail-Cycle Landfill using available data. The amount of data available from the site characterization only supports an advective flow model. However because of the magnitude of the stress caused by pumping the Cargill wells, dispersion and mixing of landfill leachate leaks will follow a relatively narrow path reasonably approximated by a particle tracking simulation. ②

The simulation does not take into account localized aquifer property variations caused by buried channel, fissure and fracture development which have all been documented on-site and which could locally enhance and further narrow flow paths further decreasing the effectiveness of any proposed groundwater monitoring system. Likewise, investigation of flow pattern variance induced by aquifer fluid density differences have not been investigated.

7.0 CONCLUSIONS

The MODFLOW and MODPATH modeling results show that if the Cargill Salt brine extraction wells are active as they have been historically, any leaks of leachate from the proposed Bolo Station Landfill will move toward the Cargill extraction well system. ③

Because of the strength of the Cargill wells as a groundwater sink, groundwater flow lines become highly regular and controlled within the system. They are essentially linear from the source of a leachate leak to the Cargill wells traveling perpendicular to the drawdown contours.. Therefore, the probability that the monitoring system would detect an advective source is low as demonstrated by the information provided above.

8.0 REFERENCES

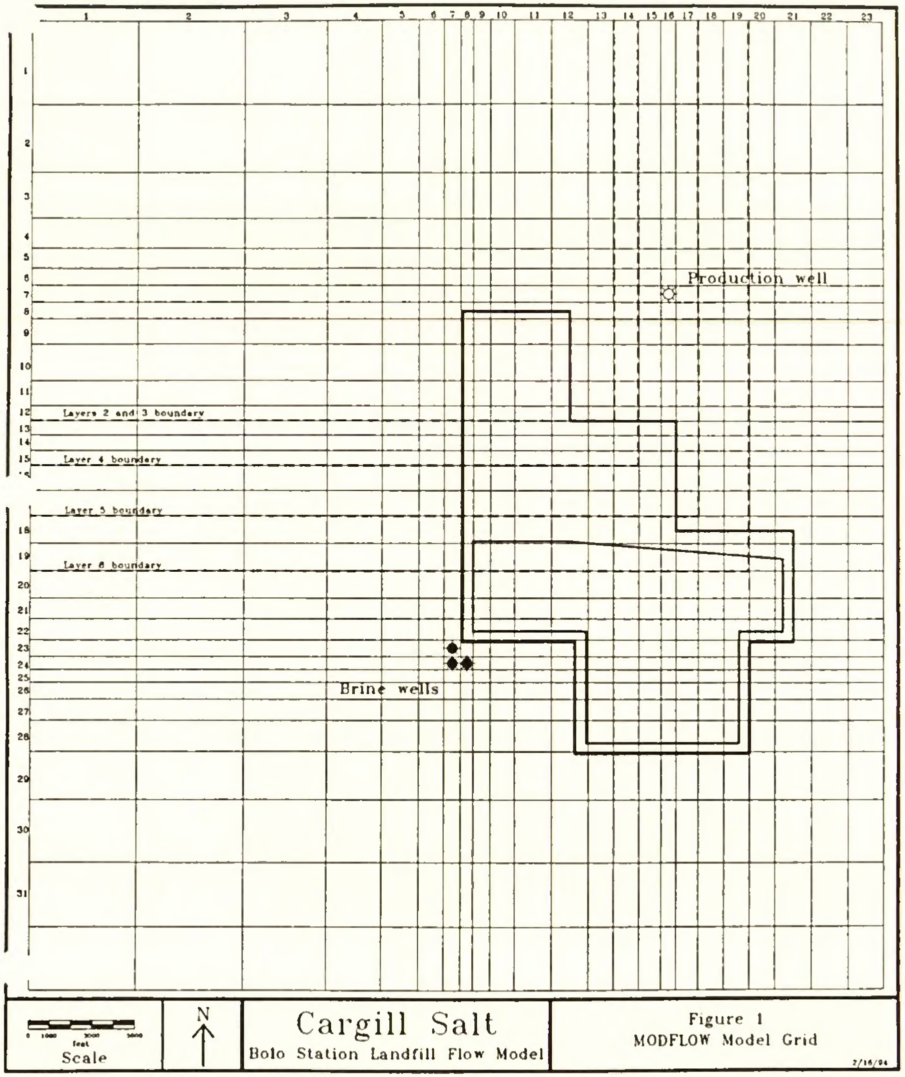
Jacobs Engineering Group. *Phase II Geologic, Hydrogeologic and Geotechnical Site Characterization Study, Bolo Station Facilities, San Bernardino County.* December, 1991

McDonald, M.G., and Harbaugh, A.W. *A Modular Three-Dimensional Finite-Difference Ground-Water Flow Model.* U.S. Geol. Survey Techniques of Water Resources Investigations, Book 6, Chapter A1, 1988.

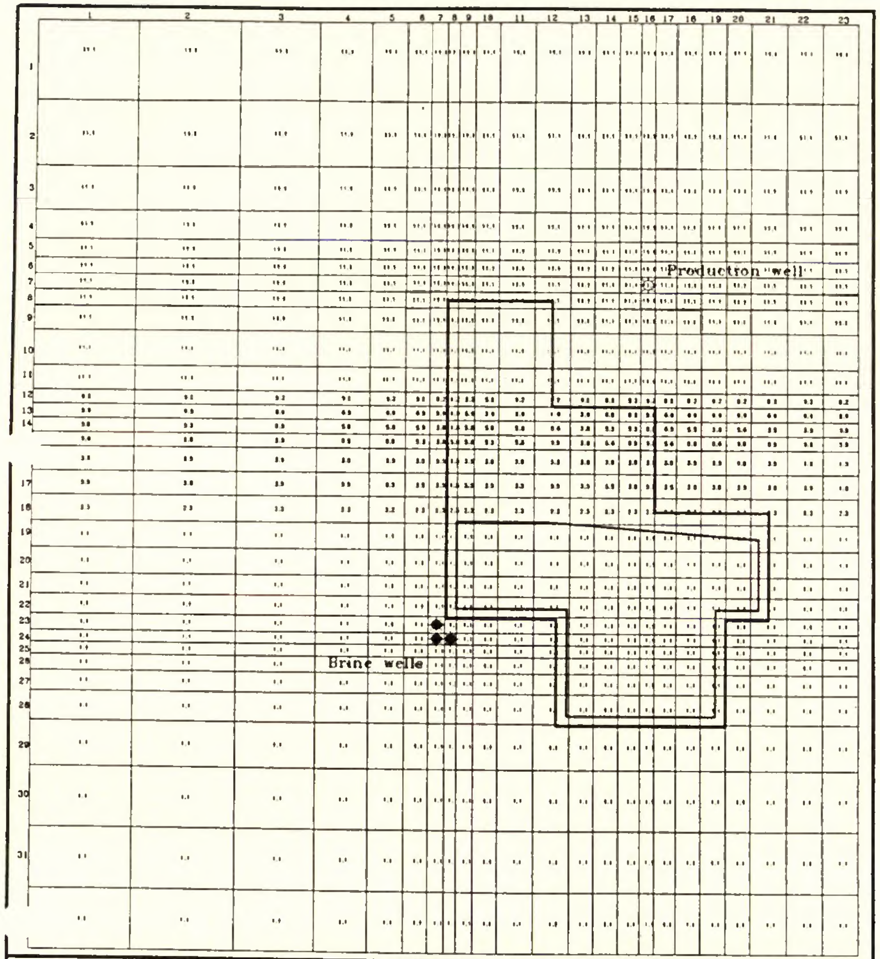
Pollack, David W. *Documentation of Computer Programs to Compute and Display Pathlines Using Results From the U. S. Geological Survey Modular Three-Dimensional Finite-Difference Ground-Water Flow Model.* U.S. Geol. Survey Open File Report 89-381, 1989.

Rust Environment and Infrastructure. *Bolo Station Landfill; Potable Water Supply and Distribution Evaluation: Water Supply Well Simulation.* 1993.

San Bernardino County, prepared by Environmental Solutions Inc. *Supplement to Draft Environmental Impact Report/Environmental Impact Statement Rail-Cycle - Bolo Station Landfill, San Bernardino County, California.* 1993.



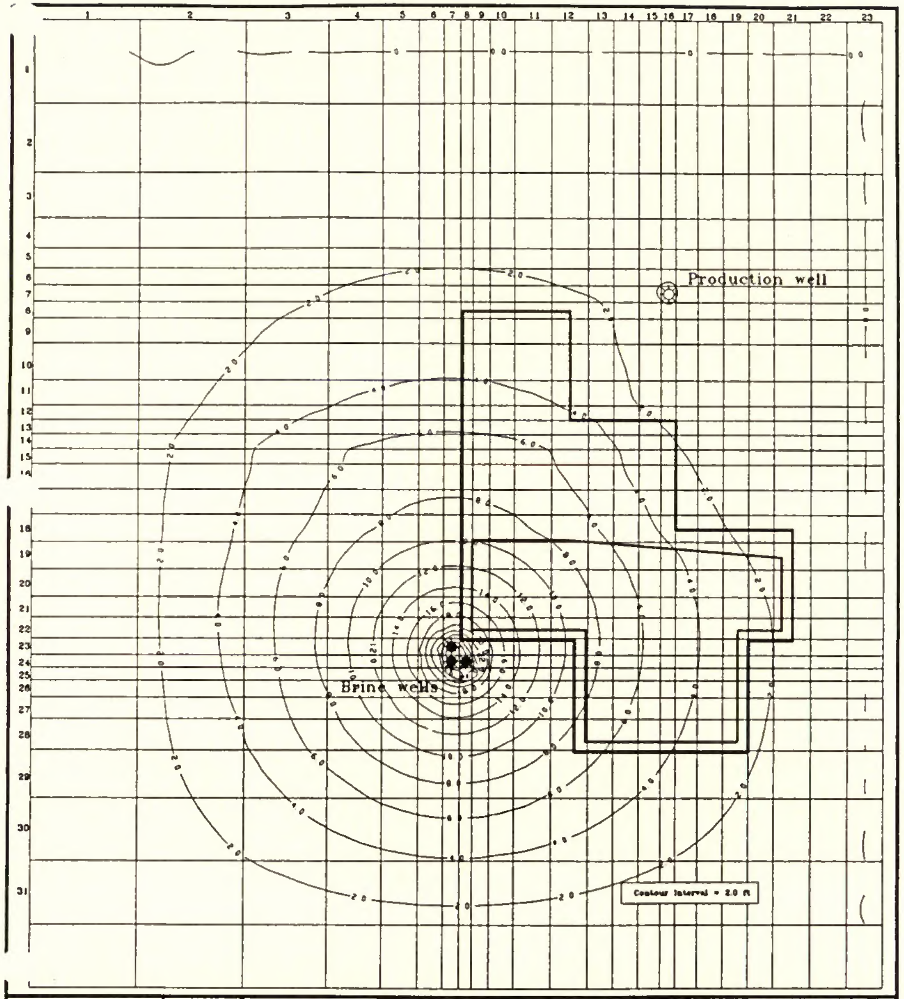
S-23



Cargill Salt
Bolo Station Landfill Flow Model

Figure 2
Horizontal and Vertical Permeability
Distribution in ft/day
2/16/94

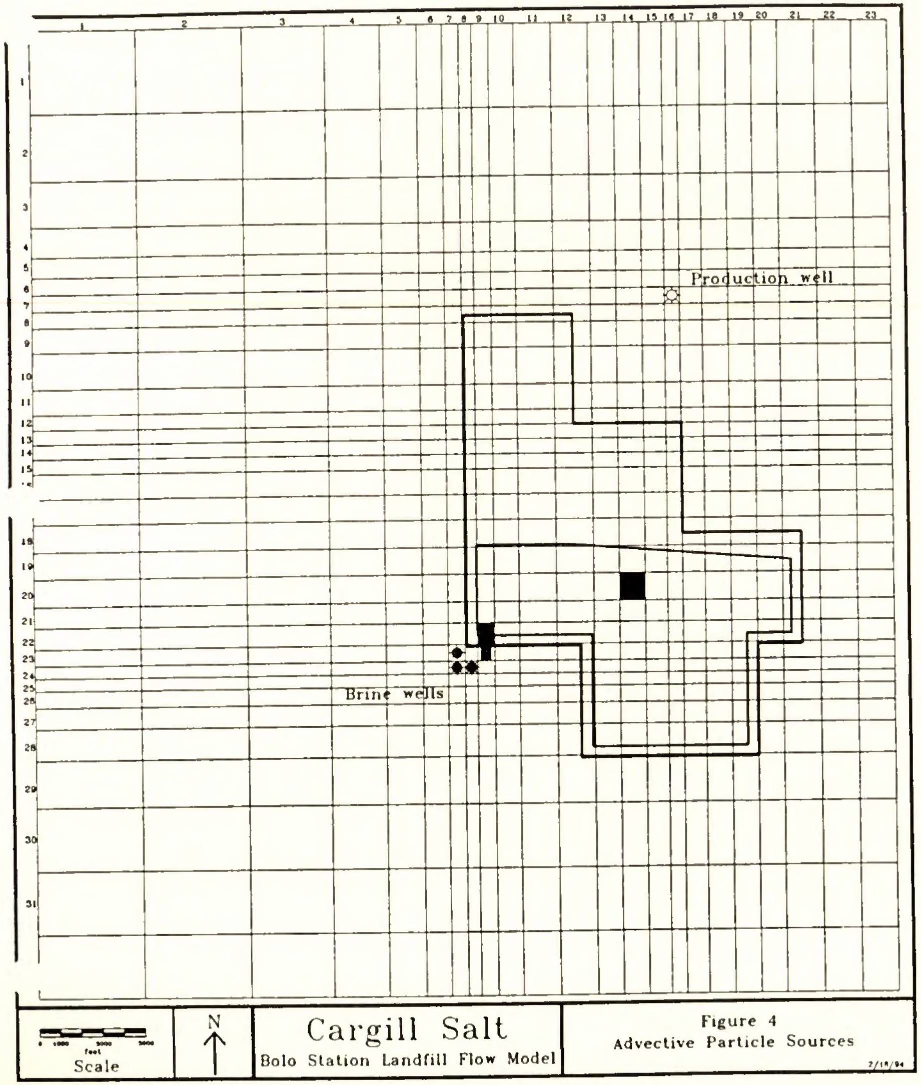
S-23



Cargill Salt
Bolo Station Landfill Flow Model

Figure 3
Steady State Drawdown Simulation
BSL Production Well Q = 70gpm
Brine Well Q = 3 @ 100 gpm
2/15/94

S-23



Cargill Salt
Bolo Station Landfill Flow Model

Figure 4
Advective Particle Sources

2/18/94

DOCUMENT S-23
FRANK J. HAGAR
RESPONSE TO COMMENTS

Response S-23-1

1. The specific ground water monitoring system for the proposed Bolo Station Landfill has yet to be established. As stated in Section 5.2.2.4 of the Supplement, screened intervals and specific locations of these wells would be determined in consultation with the RWQCB, and may be in different locations than those shown in Figure 5.2.2 of the Supplement. The monitoring system is being developed in consultation with the RWQCB and will be included in the WDRs issued for the site by that agency.

2. Criteria for ground water monitoring used in developing the Monitoring and Reporting Program that will be included in the landfill's WDRs, will include monitoring wells in the downgradient flowpath at the site boundary. At Bolo Station, with active pumping on adjacent property, wells would need to be placed in the gradient flowpath created by these wells. Contrary to the opinion of the commenter, the RWQCB will assure that the monitoring program meets the requirements of CCR Title 23 and Subtitle D.

3. As stated in Section 5.2.1.2.2 of the Supplement, "...detection would allow for the implementation of an appropriate corrective action program to prevent an impact to ground water downgradient from the landfill..."

Response S-23-2

1. The commenter's statement that, "The simulation does not take into account localized aquifer property variations caused by buried channels, fissure and fracture development which have all been documented onsite..." is unfounded. As described in Section 4.1 of the Supplement, an investigation of the site did not identify buried channels, fissures or fractures at the proposed landfill.

Response S-23-3

1. The conclusions reached in the commenter's document are based on an assumed ground water monitoring network; however, as stated in Response S-23-1, the final monitoring system will be established in consultation with RWQCB. Specifically, the final monitoring system would include downgradient wells located within flowpaths created by the Cargill wells or any other wells on adjacent property.

CADIZ
LAND COMPANY, INC.

10470 Foothill Boulevard, Suite 200
Rancho Cucamonga, CA 91730
(909) 980-2738
FAX (909) 980-6738

February 17, 1994

Mr. Randy Scott, Senior Planner
Mountain-South Desert Planning Team
Land Management Department, Office of Planning
County of San Bernardino
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, California 92415-0182

Mr. Doug Romoli
Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, California 92507-0714

Re: Rail·Cycle - Proposed Bolo Station Landfill
Supplement to Draft EIR/EIS dated December 1, 1993

Dear Mr. Scott and Mr. Romoli:

Cadiz Land Company, Inc. ("CLCI") submits the following comments on the Supplement to Draft Environmental Impact Report/Environmental Impact Statement ("Supplement") for the proposed Rail·Cycle - Bolo Station Landfill dated December 1993.

Despite efforts to provide additional information in this Supplement, the County and Bureau of Land Management ("BLM") have not adequately addressed the comments CLCI and others raised regarding the original Draft EIR/EIS of November 1992 ("DEIR/EIS"). CLCI's comments on the DEIR/EIS (dated March 1, 1993) apply to this Supplement as well and those previous comments should be considered as part of these comments as if set forth in full here. We continue to expect detailed written responses to our previous comments and to those set forth in this letter as required by CEQA and NEPA. With that in mind, CLCI has the following additional comments particular to the Supplement.

I.
INTRODUCTORY COMMENTS

We remain convinced that the proposed Rail·Cycle landfill project is incompatible with our neighboring land use in the Cadiz Valley -- the growing of high quality agricultural produce for human consumption and the potential development of surplus groundwater for use by public agencies in other portions of San Bernardino County. Our western boundary is located only one mile from the proposed landfill project. As such, we still believe firmly that the proposed Rail·Cycle project should be sited elsewhere or not approved at all. The Supplement has not alleviated our concerns in any way.

① CLCI owns or controls over 31,000 acres of land in the Cadiz area. CLCI currently cultivates 800 acres of table grapes and 640 acres of selected varieties of desert citrus. Since we submitted our last comment letter, the County approved a general plan amendment to permit expanded agricultural development on 9,600 acres. This permitted expansion must now be evaluated as a final project in the EIR/EIS for the proposed landfill.

② In addition, in January of 1994, CLCI entered into a binding Memorandum of Understanding with the Mojave Water Agency ("MWA") to investigate the feasibility of providing surplus groundwater to MWA from the basin underlying our land holdings in this area. Under this proposal, CLCI would provide as much as 30,000 acre-feet per year to MWA to assist in solving the serious and chronic water shortages within its service area. As a "reasonably anticipated future project," this proposal must be evaluated in the cumulative impacts section of the EIR/EIS for the proposed Rail·Cycle project.

③ Our concerns regarding potential contamination to our grapes and citrus intended for human consumption and the impacts to our seasonal and permanent workers as a result of this proposed landfill were set forth at length in our previous letter. We reiterate those concerns and note that we now have an additional concern, namely potential contamination of a municipal water supply.

④ Like the DEIR/EIS, the Supplement contains inaccurate and misleading data and fails to address the impacts of the proposed dump on CLCI's current and future operations. In fact, despite our previous comment clarifying our land holdings, the Supplement continues to ignore the location and extent of CLCI's land ownership. Figure 6.1 in the Supplement is inaccurate. To rectify this omission, we have once again attached as Figure 1 to this letter a map showing the location of our land in relation to the proposed Bolo Station site and Cadiz Valley alternative site.

Please note (again) that the proposed Cadiz Valley alternative site actually incorporates one section (640 acres) of CLCI property. Presumably in order to rectify this error, the County and BLM state in Section 3.3.6 of the Supplement that "implementation of this alternative would require that Section 17 be purchased from the Cadiz Land Company." This alternative should, however, be dismissed as infeasible since we have no intention of selling Section 17. In fact, we have never been consulted about purchasing this property. Therefore, the feasibility of this alternative has not been adequately assessed by the County or BLM. ④ CONT.

Given the overwhelming magnitude and longevity of this proposed mega-landfill, we had hoped that the Supplement would provide a more full and fair disclosure of all potential environmental impacts than did the DEIR/EIS. However, like the DEIR/EIS, the Supplement fails to provide the agencies and public with all information necessary to evaluate the environmental impacts associated with the project, fails to identify all significant impacts, fails to provide adequate mitigation for the significant impacts of this project, and fails to address feasible alternatives to the project.

Although our comments are directed specifically to the proposed Bolo Station site, they are also applicable to the proposed alternative sites. Our principal comments on the Supplement are set forth below.

II.

THE SUPPLEMENT FAILS TO ANALYZE PROJECT IMPACTS

As we stated previously, CEQA and NEPA require an EIR and EIS, respectively, to disclose the impacts of a proposed action and to provide a sufficient degree of analysis and technical information to allow full assessment of a project's impacts by reviewing agencies and the public. (State CEQA Guidelines §§ 15151, 15147; Silva v. Lynn (1st Cir. 1973) 482 F.2d 1282; Sierra Club v. Morton (5th Cir. 1975) 510 F.2d 813.)

The Supplement for the proposed Bolo Station landfill violates these legal standards by failing to characterize the proposed project's impacts accurately and by failing to identify many of the project's significant impacts.

A. Seismic Risks

1. Seismic risks are not described accurately.

As we stated in our previous comments, the seismic risks associated with this project were not described fairly or accurately in the DEIR/EIS. The Supplement contains many of the same inaccuracies.

In evaluating the seismic risks associated with the proposed project, the DEIR/EIS claimed that "no active or potentially active faults have been mapped within 20 miles of the [project] site, and none project toward or through the landfill site. (DEIR/EIS, p. 4.2-21.) Section 4.2.1.4.1 "Capable Faults in the Region" on p. 4.2.11 (¶ 1) stated that "the closest active fault is the Pisgah-Bullion Fault, approximately 29 miles southwest of the Bolo Station site and 35 miles southwest of the Cadiz Valley Alternative site. The nearest potentially active fault is the Ludlow Fault, approximately 15 miles northwest of the Bolo Station site and 26 miles northwest of the Cadiz Valley Alternative site." ⑤

Although additional investigations were purportedly conducted for the Supplement, the County and BLM now conclude that "there are no active or inactive faults within the vicinity of the proposed site or that tend towards the site" (Supplement, p. 4.1-3, ¶ 7, emphasis added). These statements, together with DEIR/EIS Figure 4.2.3 depicting "Faults within the Project Region" and Figure 5.2.1 "Location of Recent Seismic Activity," are inaccurate and misleading. The Supplement continues to cite as its main reference a 1992 map compilation by the California Division of Mines and Geology. The Supplement ignores more recent and more detailed geological mapping which was brought to the attention of Rail·Cycle, the County and the BLM in our comments of March 1993. One of the main purposes of a supplement to an EIR or EIS is to evaluate "new information." (Pub. Resources Code § 21166(c).) The County and BLM appear to have done nothing with the information we provided. ⑥

We have attached as Figure 2 a map showing the generalized traces of eleven fault zones which show evidence of Quaternary movement located within twenty miles (32 km) of the proposed Bolo Station site. This is the same version of Figure 2 we submitted in our previous comments. In accordance with the definitions under state law, these fault zones are considered either active or potentially active. Again, because of scale limitations, Figure 2 is not detailed. The County and BLM should review the descriptions and the numerous independent references cited in Appendices A through K of this letter for specific evidence regarding the locations, ages, and displacement histories of these fault zones. These appendices contain additional references we have discovered since our previous comments. Most of these cited references are from geologists with the U.S. Geological Survey. ⑥ CONT.

As shown in attached Figure 2, several Quaternary fault zones may directly underlie the proposed Bolo Station site and the proposed Cadiz Valley alternative site. Both of these sites are at great risk of ground failure during a seismic event, either by direct displacement or by liquefaction of the underlying sediments. Such ground failure could result in massive surface and groundwater pollution in spite of the double liner system proposed for the project.

The fault zones shown on Figure 2 and described in Appendices A through K are considered members of the "Eastern California Shear Zone." As we stated in our previous comments, this regional tectonic feature consists of several dozen structures which form a mechanically linked system of major right lateral slip. The Landers earthquake of June 28, 1992 (magnitude 7.5 + on the Richter scale) occurred on a western member of this system that had not generally been considered "active." This earthquake resulted in surface ruptures over a large area on numerous other members of the Eastern California Shear Zone. ⑦

The recent San Fernando Valley earthquake of January 17, 1994 (magnitude 6.7 on the Richter scale) occurred on a previously unmapped fault zone located in a populated region that has undergone extensive geological investigation, including deep exploratory drilling for oil and gas. In light of the above seismic events, it is clear that the limited geophysical surveys and trenching conducted on the Bolo Station site are not adequate for assessing the seismic risks of the site and the surrounding area. ⑧

Despite the additional seismic discussion presented in the Supplement, we still believe that the proposed project does not comply with state and federal seismic regulations governing the siting of landfills, based on the above information. These regulations require, among other things, that a Class III landfill be designed to withstand a maximum probable earthquake. (Cal. Code Regs., Title 23, § 2547.) Under state law, a Class III landfill cannot be located on a Holocene fault (id. at § 2533) and under federal law, a new solid waste facility may not be located within 200 feet of a Holocene fault. (40 C.F.R. § 258.13). Federal law also requires that a solid waste facility ⑨

be designed to resist the maximum horizontal acceleration expected from a seismic event. A demonstration must be made that the landfill is not located in an "unstable" area. (40 C.F.R. §§ 258.13, 258.14, 258.15.) ⑨ CONT.

In discussing historic earthquake activity in proximity to the proposed Bolo Station and Cadiz Valley alternative sites the Supplement (like the DEIR/EIS) fails to reference numerous recent earthquakes (1978-1992) which have been identified by S. K. Groter (1992) of the U.S. Geological Survey. Ms. Groter has plotted the epicenters of over 100 earthquakes located within 20 miles (32 km) of the proposed Bolo Station site. Two of these earthquakes had magnitudes greater than 5.5. ⑩

The DEIR/EIS conceded that its assessment of seismic risks was incomplete by stating that the RWQCB was requiring further verification of the lack of active faults and that Rail·Cycle was implementing a "supplemental site verification study." (DEIR/EIS, p. 5.2.-1.) However, by ignoring the above referenced geological mapping and important seismic data, the "supplemental" study is equally inadequate. ⑪

2. All seismic impacts are not included.

Since both the DEIR/EIS and Supplement have failed to analyze the true seismic risks associated with this proposed project, the conclusion by the County and BLM that seismic impacts are mitigable (DEIR/EIS, p. 5.2-13) is still unsupported. In fact, based on our review of work by U.S. Geological Survey personnel and others, the seismic risks appear to be considerable. Although Rail·Cycle proposes use of a double liner system, we believe that a significant seismic event within 20 miles (32 km) of the site could result in ground rupture and/or liquefaction and result in massive failure of the liner system. ⑫

Specifically, we object to the conclusion stated in Supplement Section 4.1.2.3.4, § 5 (p. 4.1-6):

> "In summary, the absence of Holocene faulting beneath the proposed site was verified by the 1992 geophysical survey. The information supports the geomorphic and seismic data for the proposed site, and the findings and conclusions of the Draft EIR/EIS. Based on the data, there are no active faults within or in the vicinity of the Bolo Station site."

⑬

Merely digging four trenches, 60 to 90 feet in length, cannot "verify the absence of Holocene faults" beneath a project site of 7.5 square miles, or support the conclusion stated in Section 5.1.2.1 that "no supplemental mitigation measures regarding these issues are required."

We renew our request that the EIR/EIS be revised to provide an accurate and informed evaluation of the seismic risks of the proposed project. Such risks include liner breakage, liquefaction and potentially massive surface and groundwater contamination. Specific impacts to CLCI (identified below and in our previous comments) must be evaluated and feasible mitigation measures adopted for the considerable seismic impacts associated with the proposed project. ⑬ CONT.

3. Liquefaction is not evaluated accurately

Liquefaction, or "thixotropy," is the property of otherwise stable sediments to turn into fluids when agitated, such as by a seismic event. The types of sedimentary deposits most susceptible to liquefaction are water-saturated, fine to medium-grained, well-sorted materials such as those described by Rail·Cycle as underlying much of the proposed Bolo Station site. (Supplement Section 4.1.)

The risk of liquefaction is greatly increased by static loads, such as those which would be imposed by the proposed landfill structures. In the event of liquefaction, or differential subsidence related to liquefaction, we believe that the Rail·Cycle containment liners would fail catastrophically, resulting in surface and ground water pollution. ⑭

Despite these risks, both the DEIR/EIS and Supplement have virtually ignored the risk of liquefaction and differential subsidence. It is not necessary for fault displacement to occur immediately beneath a site to precipitate liquefaction. The recent San Fernando earthquake of January 17, 1994 caused massive liquefaction damage to the King Harbor Marina (Redondo Beach) located approximately 35 miles south of the earthquake epicenter.

Section 5.2.1.1., paragraph 1 of the DEIR/EIS concluded that "most of the seismic activity will probably occur more than 20 miles from the site, and the accelerations experienced at the site will be much less than the accelerations at the epicenter". As stated above, neither the DEIR/EIS nor the Supplement reference data in a recent map published by the U.S. Geological Survey (Groter, 1992) which identifies the epicenters of over 100 earthquakes within 20 miles (32 km) of the proposed Bolo Station ⑮

site, including two with magnitudes greater than 5.5 on the Richter scale. ⑮ CONT.

Section 5.1.1.2.1., ¶ 3 of the DEIR/EIS concluded that maximum ground settlement due to the weight of the landfill structures would not exceed 15.6 feet. In written correspondence to San Bernardino County (1993), Mr. W.F. McGinn, Superintendent of The Atchison, Topeka and Santa Fe Railway Company, expressed concern about soil stability in the Bristol Basin, and the potential impacts of subsidence on the railroad's "mainlines" due to groundwater pumping in the basin. Please note that the Santa Fe mainlines pass directly through the proposed Bolo Station site, and that they are located immediately adjacent to the proposed landfill structures. Neither the DEIR/EIS nor the Supplement suggest mitigation measures for disruption to the railroad mainlines due to subsidence of up to 15.6 feet. ⑯

Similar concerns about the potential impacts of subsidence were expressed in correspondence by Mr. L.A. Boll (1993), Permits Administrator of the All American Pipeline Company. Both of these letters were submitted directly to the County during the public review period for the EIR prepared for CLCI's agricultural expansion.

B. Groundwater

1. The groundwater data in the Supplement is incomplete.

The comments we submitted on the DEIR/EIS regarding groundwater apply equally well to the Supplement. None of the extensive data provided to the project proponent regarding groundwater recharge and storage in the area are presented in the Supplement. The Supplement continues to present estimates of groundwater recharge to Cadiz Valley that are grossly understated. As detailed in our previous comments, we estimate recharge at approximately 20,000 acre-feet/year, with an estimated accuracy of plus/minus 25%. Support for this estimate is set forth in our previous letter. Despite this information, the Supplement, like the DEIR/EIS, claims incorrectly that the Bristol Basin is in "overdraft" (Sections 1.4; 3.2.6; 6.2.3.1). ⑰

DEIR/EIS Figures 4.4.10 "Estimated Natural Ground Water Contours" and 4.4.11 "Existing vs. Historic Fresh Water - Brackish Water Interface" and Table 4.4.5 indicated that the proposed Bolo Station site overlies potable water at depths as shallow as 50 feet. The Supplement Section 4.2.2.2, ¶ 2 states the following: ⑱

> "The State Water Resources Control Board (SWRCB) has adopted the 'Sources of Drinking Water Policy' (Resolution No. 88-063, May 19, 1988). This policy considers waters of the State with TDS less than 3,000 mg/L to be a potential municipal or domestic water supply. Based on the SWRCB criteria, the majority of the ground water near the water table under the proposed [Bolo Station] site appears to met the criteria for potable water."

⑱ CONT.

Locating a landfill directly over a potential municipal or domestic water supply is illegal. This objection applies to both the proposed Bolo Station and Cadiz Valley Alternative sites.

Groundwater in the Bristol and Cadiz basins is currently being put to domestic, agricultural and industrial uses and, as stated above, CLCI has entered into a binding Memorandum of Understanding with MWA to investigate the feasibility of providing surplus groundwater to MWA. This supply must be protected. Impacts on this supply must be evaluated and mitigated before the proposed project progresses any further.

⑲

As stated in our previous comments, a Class III landfill must be sited to ensure that there is no impairment of beneficial uses of groundwater and proponents of such a landfill must evaluate current and anticipated uses of groundwater. (Cal. Code Regs., Title 23, § 2533.) This comment is even more applicable now in light of the MWA proposal described above. Current project design is inadequate to safeguard this irreplaceable resource.

2. Impacts to CLCI are not identified.

Despite the detailed information we provided in our previous comments about the impacts of this proposed project on CLCI's agricultural operations, the Supplement fails to address these impacts. Therefore, we reiterate and highlight the concerns set forth in our previous letter at pages 9-17. In addition, impacts of the landfill on CLCI's development of potable groundwater must now be addressed. Mitigation measures to prevent or reduce groundwater impacts must be identified and implemented as conditions of approval for this proposed project.

⑳

C. Flood and Erosion Risks

1. Flood and erosion risks are not described accurately.

㉑

The depictions in the Supplement of flood and erosion risks at the Bolo Station site are as inaccurate and misleading as those in the DEIR/EIS. The proposed Bolo Station site lies directly on an active (Holocene) member of the Orange Blossom Wash drainage system. This drainage system has a recharge (catchment) area of over 109 square miles and topographic relief of over 6,100 feet. Portions of the proposed Cadiz Valley alternative site lie directly on an active portion of the Fenner Wash drainage system. This drainage system has a recharge area of approximately 1,140 square miles and topographic relief of nearly 7,000 feet. Our request to include this information has gone unheeded.

㉑ CONT.

The discussions in Section 5.2.1.1 "Surface Water" of the Supplement are based on the assumed elevation of a "100-Year Floodplain". This assumed "floodplain" was calculated by Jacobs (1990) based on the potential occurrence of a 100-year, 24-hour storm event with 2.5 inches of precipitation falling on the basin floor, 3.0 inches along the surrounding mountain front, and 3.5 to 4.5 inches in the surrounding mountains. No actual precipitation data or analysis methodology is presented for this calculation. In addition, the surface water drainage discussions presented in Section 4.2.1, ¶ 1 assume "eight different drainage areas with a combined drainage area of 10.6 square miles . . ." This assumption is incorrect.

That assumption of a 24-hour storm event may be reasonable for analysis of potential debris flows, sheet flooding, and flash flooding, but such a period is far too short to assess the risk of inundation due to flooding of Bristol Lake. We have observed numerous occurrences of standing water on Bristol Lake lasting many months. Accordingly, analysis of potential flooding must be based on extreme annual precipitation, rather than 24-hour storm events, to more accurately depict flood impacts.

㉒

In addition, we have serious concerns about the use of an assumed return period of 100 years. The proposed project is intended to be active for "60 to 100 years in the future" (p. 5.2-2) and "postclosure monitoring and maintenance" should extend well beyond that period (far longer than the 30 years proposed in the DEIR/EIS (Section 3.6.2). Any leakage from the proposed landfill, due to inundation, erosional flooding, or rupture of the liner system, would result in catastrophic pollution of surface water, potable groundwater, and brines of substantial economic value.

㉓

The following is a quotation from California Department of Water Resources Bulletin No. 195 (1976) "Rainfall Analysis for Drainage Design" (p. 23):

> "Frequency analysis defines the event which can be expected once every 'Y' years on the average. This does not imply that a 'Y-year event' will occur regularly every 'Y' years. Return periods, as well as flood magnitudes, are subject to analysis. For example, there is a two percent chance that a 50-year event will occur in any one year... Since some dams have lives exceeding 100 years, and since a low level of risk, such as one-in-a-hundred chance of failure, is desirable, the joint probabilities of the two events can be calculated by multiplying, in this case, a one-in-a-hundred risk with a 100-year project life for a design return period of 10,000 years."
>
> "The permissible level of risk during the project life can be considered when a return period is selected. A structure with a one-year useful life, such as a temporary cofferdam, for instance, for which a one percent chance of failure would constitute a permissible level of risk, would be designed for a return period of 100 years."

㉓ CONT.

Similar guidelines relating to permissible levels of risk and return periods are presented by Linsley and others (1958). In consideration of these guidelines, we believe that the criteria of a 100-year return period, as employed by Rail·Cycle, is dangerously inadequate. A more suitable return period would be 10,000 years, or Probable Maximum Precipitation (PMP), as employed by the CDWR (1976 & 1982).

The 100-year flood design criteria employed by Rail·Cycle (Supplement, Section 5.2.2) assumes the statistical probability of failure during the life of the project.

2. Inundation by Bristol Lake

㉔

The following is an estimate of potential for inundation by rising water levels in Bristol Lake. The computation was performed several different ways using the methods outlined in

CDWR (1976 & 1982) and data on long duration-frequency precipitation published by the CDWR (1983).

The drainage basin (catchment area) which is tributary to Bristol Lake (east of the Amboy volcanic field) totals approximately 1,700 square miles. The playa surface of Bristol Lake is at an elevation of approximately 600 feet. The potential surface area of Bristol Lake represented by the 610 feet elevation contour is approximately 69 square miles (44,000 acres).

We have assumed the precipitation data recorded at Mitchell Caverns (elevation 4,306 feet) to be generally representative of the drainage (catchment) basin which is tributary to Bristol Lake. Note that a substantial percentage of this basin is at an elevation above 4,306 feet, with a maximum elevation of 7,532 feet. During the period 1959-1982, the Mitchell Caverns Weather Station has measured average annual precipitation at 9.4 inches, with a standard deviation of 5.4 inches.

㉔ CONT.

The CDWR (1983) long duration-frequency microfiche for Mitchell Caverns provides the following estimates of annual precipitation (P_a):

P_a = 25.40 inches for return period of 100 years.

P_a = 41.50 inches for return period of 10,000 years.

P_a = 87.31 inches for annual Probable Maximum Precipitation (PMP).

Total annual precipitation within the Bristol Lake drainage basin is therefore given by:

Total P_a = (25.40 in)(1700 mi^2)(640 ac/mi^2)/(12 in/ft) = 2.30×10^6 AF for return period of 100 yrs.

Total P_a = (41.50 in)(1700 mi^2)(640 ac/mi^2)/(12 in/ft) = 3.76×10^6 AF for return period of 10,000 yrs.

Total P_a = (87.31 in)(1700 mi^2)(640 ac/mi^2)/(12 in/ft) = 7.92×10^6 AF for an annual PMP event.

The rise (R) in water level for Bristol Lake is therefore given by the following, assuming a "runoff coefficient" of 85%, as presented in the Rail·Cycle study by Jacobs (1990, p.22):

R = (2.30×10^6 AF)(0.85)/(4.4×10^4 ac) = 44 feet for return period of 100 yrs.

R = $(3.76 \times 10^6$ AF$)(0.85)/(4.4 \times 10^4$ ac$)$ = 73 feet for return period of 10,000 yrs.

R = $(7.92 \times 10^6$ AF$)(0.85)/(4.4 \times 10^4$ ac$)$ = 153 feet for an annual PMP event.

Even the 100-year flood event would inundate much of the proposed Bolo Station landfill site, resulting in massive pollution of surface water, potable ground water, and brines. The 10,000-year and PMP events would be catastrophic. The discussions in Sections 5.2.1.2.1. and 5.2.1.2.2. of the Supplement regarding protection of the proposed landfill in the event of a 100-year flood event are without scientific merit. There is also no meaningful discussion of the impacts of lesser, more likely flood events, such as a 50 year flood or five year flood. ㉔ CONT.

3. Flood Erosion

Analysis of U-2 photography and field reconnaissance indicate that the proposed Bolo Station site is located on geologically recent (Holocene) and active members of the Orange Blossom Wash drainage system. This system has a catchment area of over 109 square miles (70,000 acres). In addition, this catchment area has an elevation gain of over 6,100 feet. We believe that the risk of catastrophic erosion to the proposed landfill by debris flows, sheet flooding, and flash flooding is far greater than presumed by Rail·Cycle.

Plate 10 of CDWR (1976) indicates for the Bristol Lake area a factor of 0.60 of Mean Annual Precipitation for estimating the magnitude of a 100-year, one-hour storm event (P_h). Using the Mitchell Caverns data, described above, gives: ㉕

P_h = (0.60)(9.4) = 5.64 inches for a one-hour 100-yr event.

Plate 11 indicates a local factor of 0.80 for a 1,000-year, one-hour storm event:

P_h = (0.80)(9.4) = 7.52 inches for a one-hour 1,000-yr event.

Plate 12 indicates a local factor of 2.0 for PMP during a one-hour storm event:

P_h = (2.0)(9.4) = 18.8 inches for a one-hour PMP event.

The CDWR microfiche (April 1983) provides the following estimates for daily (24-hour) precipitation events (P_d):

P_d = 6.33 inches for return period of 100 years.

P_d = 9.16 inches for return period of 1,000 years.

P_d = 11.98 inches for return period of 10,000 years.

P_d = 20.30 inches for a 24-hour PMP event.

In the event that such storm events were to occur within the Orange Blossom Wash drainage basin, and assuming Rail·Cycle's "runoff coefficient" of 85%, 24-hour floods (F) of the following magnitudes could occur:

F = (6.33 in)(.85)(70,000 ac)/(12 in/ft) = 31,400 AF for return period of 100 yrs. ㉕ CONT.

F = (9.16 in)(.85)(70,000 ac)/(12 in/ft) = 45,400 AF for return period of 1,000 yrs.

F = (11.98 in)(.85)(70,000 ac)/(12 in/ft) = 59,400 AF for return period of 10,000 yrs.

F = (20.30 in)(.85)(70,000 ac)/(12 in/ft) = 100,700 AF for a 24-hour PMP event.

100,700 AF is equivalent to a body of water one square mile in area with a depth of 157 feet. The Supplement presents no design criteria for handling such a massive volume of water. Even a 100-year event resulting in a flood of 31,400 AF would result in massive failure of the proposed landfill. The 10,000-year and PMP events would result in catastrophic and irreparable surface and groundwater pollution.

The above computations are supported by numerous actual observations in the Cadiz area. Gail Hunt (1966, p. 9) has reported the following:

> "Records of the Atchison, Topeka and Santa Fe Railway Company reveal that high intensity rainfall and resulting runoff through Schuyler Wash caused considerable damage along the A.T. & S.F. Main Line and Parker Branch Line near Cadiz during the August 25 to 30, 1932 storm and again during the August 17, 1959 storm. Runoff from each of these storms overflowed the tracks over long distances along the Parker Branch Line. Study of recorded rainfall and runoff show that these storms exceeded the expectable 100-year rainfall intensity in portions of the Fenner Valley and that total rainfall from the August 17, 1959 storm may have averaged 3 inches over the affected area in ㉖

> the Fenner Valley with a maximum cumulative rainfall of 6 inches at some points. The duration of the 1959 storm was less than twenty-four hours." ㉖ CONT.

A review of County records will show more than two dozen washouts on National Trails Highway (Route 66) in the Cadiz area and other areas during a series of storms in the mid-1970s. Several of these washouts were so severe that the highway bridges had to be completely removed, to be replaced with dip crossings. ㉗

The Supplement, Section 5.2.1.1.2, ¶ 1, states:

As depicted in Figure 3.1, the basic stormwater run-on and runoff features for the proposed landfill have not changed since preparation of the Draft EIR/EIS, but they are being refined as part of final design. Surface water flows from north of the ATSF rail line and would be intercepted by an unlined earthen diversion channel located directly south of the railway and would be diverted east of the site.

Paragraph 2 states:

> "Stormwater run-on and runoff control structures, including temporary and permanent diversion ditches, sedimentation and retention basins, are designed to accommodate a 100-year, 24-hour storm event." ㉘

Neither the DEIR/EIS nor the Supplement identify the volume of "run-on and runoff" expected in such a storm event, nor do they present evidence that the proposed system of "diversion ditches", etc. would be adequate.

We do not agree that protections from 100-year return period events are adequate, since erosional failure of the landfill could result in catastrophic and irreparable surface and groundwater pollution. In addition, the proposed "diversion" of natural storm runoff to the "east" of the proposed Bolo Station site could precipitate massive flooding of CLCI land located only one mile east of the proposed site. This impact must be addressed and mitigated.

4. Impacts to CLCI are not identified.

Both the DEIR/EIS and the Supplement fail to identify the methods and parameters used to estimate the magnitude of a 100-year precipitation/flood event. We request that the County and BLM provide this information as we are concerned that these documents have significantly underestimated these risks. Accordingly, we reiterate our concern that the mitigation measures proposed in Section 5.4.5.1 of the DEIR/EIS would be inadequate to mitigate for flooding and erosion impacts to CLCI's property during a major precipitation event. Those impacts were listed in our previous letter. ㉙

The EIR/EIS must analyze these impacts and identify feasible mitigation measures which will be made conditions of project approval.

D. Public Health and Safety

Like the DEIR/EIS, the Supplement fails to provide evidence to support the conclusion that the project will have no significant impacts on public health and safety. The legal standard is strict for disease vectors: Owners or operators of landfills must prevent or control disease vectors. (40 C.F.R., § 258.22.) One of the most important marketing advantages of CLCI's Cadiz Valley site is that it is currently free of traditional agricultural pests. CLCI goes to considerable effort and expense to protect this unique advantage by disinfecting all equipment brought into the Cadiz Valley from other agricultural areas and by using minimal pesticides. The impacts from disease vectors acknowledged in the DEIR/EIS and the Supplement could have a major impact on the marketability of our produce. The impacts we listed in our previous letter must be addressed and mitigated. ㉚

In addition, the Supplement has failed to alleviate our concerns regarding the project's air quality, noise, transportation and land use impacts. Those impacts were listed in our previous letter. We again request that they be addressed and mitigated. ㉛

III.

THE MITIGATION MEASURES DESCRIBED IN THE SUPPLEMENT ARE INADEQUATE

Since both the DEIR/EIS and the Supplement have failed to address the impacts of the proposed dump on CLCI, they have ㉜ also failed to identify mitigation measures to reduce those impacts. We request that at the least, mitigation measures for the impacts identified above be added to the EIR/EIS. However, as stated above, we believe the proposed project is incompatible under any circumstances with our current and future land uses as approved by San Bernardino County. ㉜ CONT.

A critical component of an EIR under CEQA is the "mitigation monitoring or reporting program" (Pub. Resources Code § 21081.6.). Because of the magnitude of this project and the importance of its mitigation measures, this plan should have been developed and circulated for review along with this Supplement. As we stated in our previous comments, while circulation of a draft monitoring plan is not required, early preparation and circulation of the plan provides the public and lead agencies with an overall view of how the mitigation measures will be implemented. For this project, it is critical to see how each mitigation measure will be enforced and funded. We request that this plan be circulated immediately. ㉝

IV.

THE SUPPLEMENT FAILS TO ANALYZE CUMULATIVE IMPACTS ADEQUATELY

Cumulative impacts analyses have been held inadequate when they understate the severity of impacts, omit information that should reasonably have been included and when they have not covered a reasonable geographic scope. (Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692; NEPA: Akers v. Resor (W.D. Tenn) (1978) 443 F.Supp. 1355.) The Rail·Cycle EIR/EIS fails on all counts.

Both the DEIR/EIS and the Supplement include CLCI's agricultural expansion as one of the projects contributing to cumulative impacts. However, these documents fail to discuss the impact of the Bolo Station landfill, along with the impacts of the many other landfills, mines, and hazardous and low-level radio-active waste sites proposed in the region, on CLCI's operations. Since CLCI is part of the affected environment, impacts to it should be disclosed. These impacts were listed in our previous letter. ㉞

The Supplement fails to identify "reasonable options" for mitigating cumulative impacts as required by CEQA (State CEQA Guidelines § 15130(b)). We request that the EIR/EIS be revised to provide more information about cumulative impacts and discuss reasonable options for mitigating them.

As noted above, the cumulative impacts analysis must now also include CLCI's future groundwater development proposal. ㉞ CONT.

V.

THE EVALUATION OF ALTERNATIVES IS INADEQUATE

As we stated previously, we cannot move our operation; Rail·Cycle can. We request that more environmentally appropriate sites be addressed as set forth in our previous letter. ㉟

VI.

CONCLUSION

We continue to believe that the most prudent course of action would be to seek alternate locations or to forego this project altogether. At the least, this project should not be approved until the concerns stated in this letter and our previous letter, as well as all comments raised by all other parties, have been addressed. ㊱ We also understand, but have not been able to confirm, that since the circulation of the supplement significant new analysis and redesign of the project has been undertaken by Rail·Cycle. Under CEQA and NEPA, this information should be provided to the public through recirculation of an entirely new draft EIS/EIR. ㊲

We request that a draft response to our comments be provided to us directly well in advance of the County's and BLM's public hearings for this project or well in advance of consideration of this project for approval.

Yours sincerely,

Ted Dutton
Vice President

S-24

REFERENCES CITED:

Boll, L.A., (10 September 1993) Letter to Randy Scott, County of San Bernardino, Planning Department: "Cadiz Valley Agricultural Development - Draft EIR", 3 p.

California Department of Water Resources (1976) Rainfall Analysis for Drainage Design, DWR Bulletin No. 195, 3 volumes.

California Department of Water Resources (1982) Rainfall Depth-Duration-Frequency for California, 39 pages plus microfiche.

California Department of Water Resources (1983) Long Duration-Frequency Microfiche.

California Division of Mines & Geology (1992) Preliminary Fault Activity Map of California: DMG Open-File Report 91-03

Groter, Susan K. (1992) Southern California Earthquakes: U.S. Geological Survey, National Earthquake Information Service, Open-file report 92-533, map scale 1:375,000.

Hunt, Gail S. (1966) Ground Water Geology of the Bristol and Cadiz Valleys, San Bernardino County, California: M.S. Thesis, Department of Geology, University of Southern California, 76 p.

Jacobs Engineering Group Inc., (1990) Cultural Resources Site Characterization Study, Class III Cultural Resources Inventory, Bolo Station Facilities, San Bernardino County.

Linsley, R.K., Kohler, M.A., & Paulhus, J.L. (1958) Hydrology for Engineers: McGraw-Hill Book Company, 340 p.

McGinn,W.F., (13 August 1993) Letter to Randy Scott, County of San Bernardino, Planning Department: "Reference Cadiz Land Company's Draft Environmental Impact Report (DEIR) for their Development Proposal", 3 p.

S-24

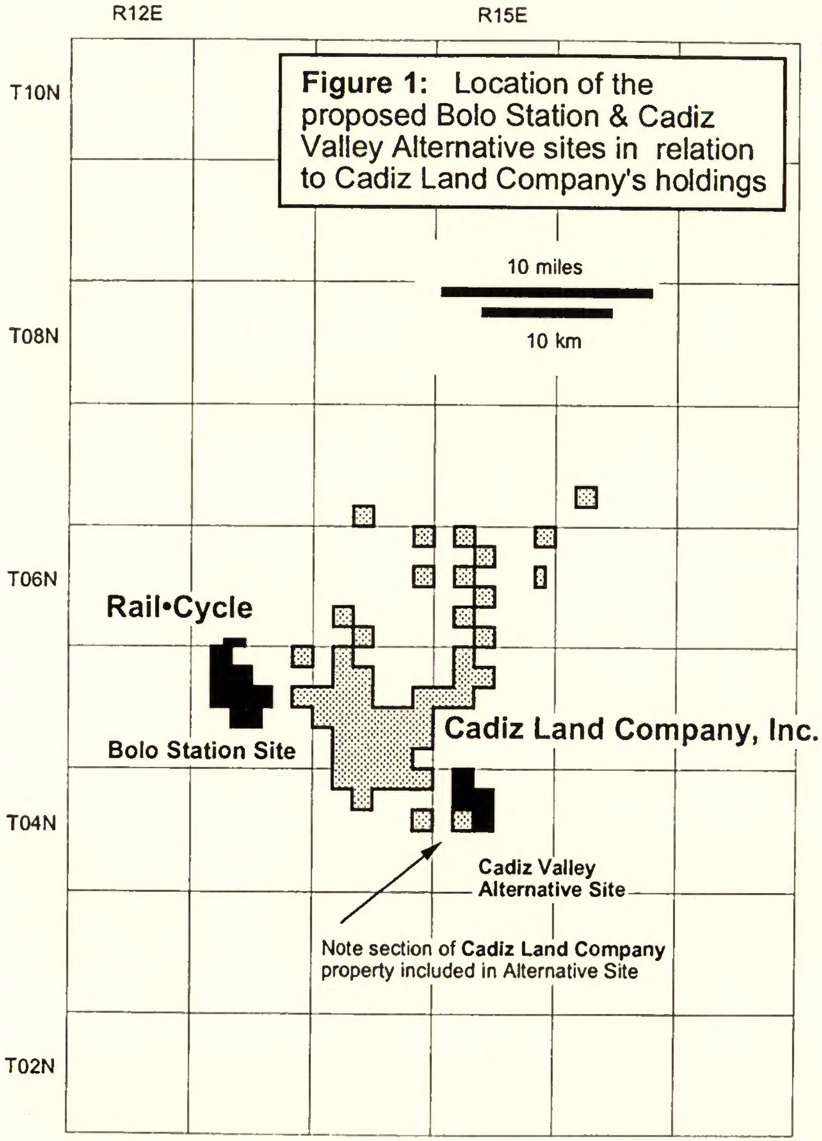


Figure 1: Location of the proposed Bolo Station & Cadiz Valley Alternative sites in relation to Cadiz Land Company's holdings

Note section of **Cadiz Land Company** property included in Alternative Site

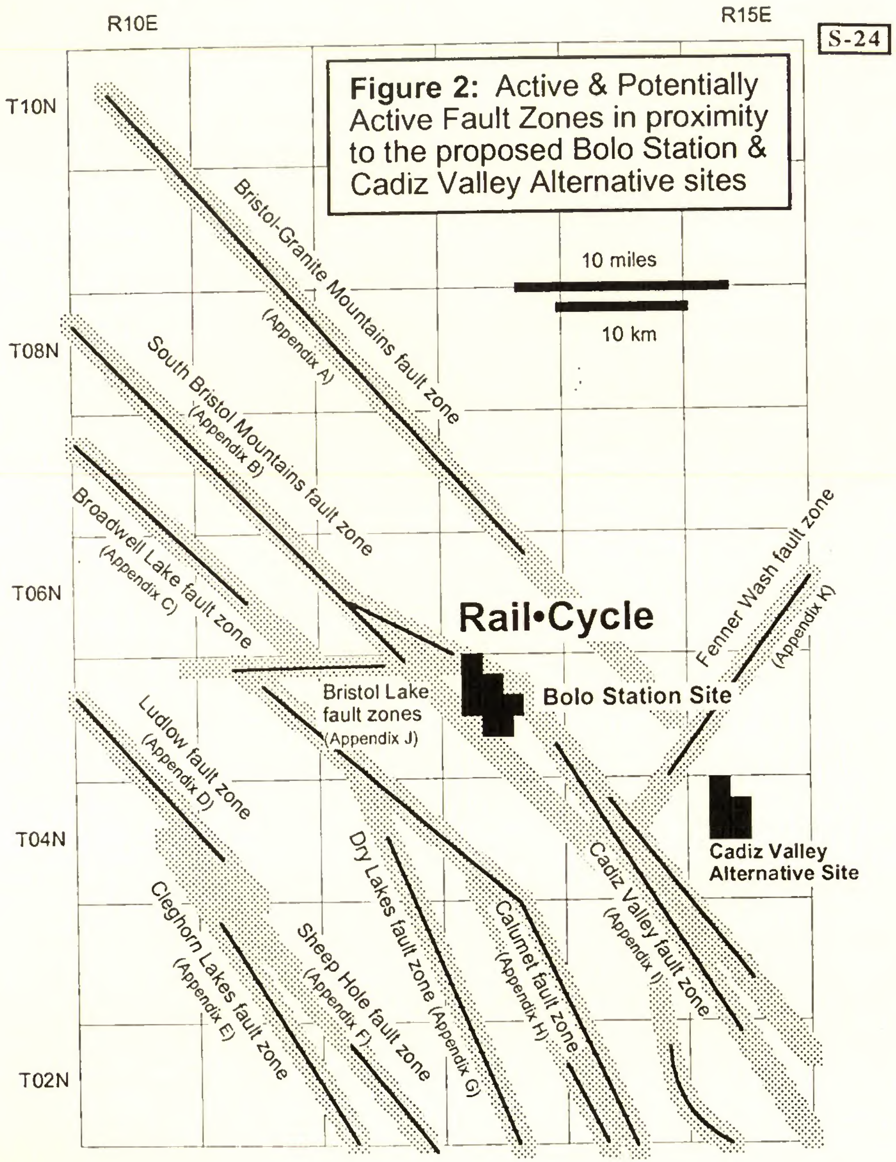


Figure 2: Active & Potentially Active Fault Zones in proximity to the proposed Bolo Station & Cadiz Valley Alternative sites

January 1994

Appendices

The following appendices provide general descriptions and bibliographic references for the eleven fault zones shown in Figure 2. Because of scale limitations, Figure 2 is unable to depict specific detail. The reader is referred to the cited references for evidence regarding the locations, ages, and displacements along these fault zones.

We have followed the conventions of the **Rail•Cycle Draft EIR/EIS** in assigning ages and seismic risks to these fault zones. The **Quaternary** period is divided into the **Pleistocene** and **Holocene** (Recent) epochs. The **Pleistocene** epoch extended from approximately 2 million years to approximately 10,000 years ago. The **Holocene** epoch extends back to the end of the **Pleistocene**, approximately 10,000 years ago.

In accordance with the **California Public Resources Code**, an **"active fault"** is defined as one that has had surface displacement within **Holocene** time. A **"potentially active fault"** is defined as one that has shown evidence of surface displacement during the **Quaternary** period. "**Inactive faults**" are those which have not shown surface displacement within the Quaternary period.

Appendix A

Bristol-Granite Mountains fault zone:

Also known as the Bristol Mountains fault zone and as the Granite Mountains fault, this pronounced structural feature has been proposed by several investigators as the southern continuation of the Death Valley fault zone. In the northern Bristol Mountains, this structure is reported to have undergone right lateral slip of as much as 6 mi (10 km), with displacement of soil of late Pleistocene age. Southward continuations of this fault zone, located beneath Orange Blossom Wash and Cadiz Valley, may underlie the proposed Cadiz Valley Alternative site. It has been mapped to within approximately 6 mi (10 km) of the proposed Bolo Station site. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Brady, R.H., III, 1988, Southward continuation of the southern Death Valley fault zone from the Avawatz to the Bristol Mountains, San Bernardino County, California: Geological Society of America, Abstracts with Program, v. 21, no. 5, p.59

Brady, R.H., III, 1992, The Eastern California Shear Zone in the northern Bristol Mountains, southeastern California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 6-10

Brady, R.H., III, in press 1993, Stratigraphy of the northern Bristol Mountains in relation to Cenozoic tectonics, northern Bristol Mountains, California, in Sherrod, D.R. and Nielson, J.E., eds., Tertiary stratigraphy of highly extended terranes, California, Arizona, and Nevada: U.S. Geological Survey Bulletin 2053

Dokka, R.K., & Travis, C.J., 1990, Late Cenozoic strike slip faulting in the Mojave Desert, California: Tectonics, v.9, no. 2, p. 311-340

Francke-Loriz, C., & Brady, R.H., III, 1992, Preliminary Application of Satellite Image Analysis to the Eastern California Shear Zone in the Northern Bristol Mountains, southeastern California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 33-36

Gamble,J., 1959, Geology and mineral resources of Township 8 North, Ranges 11 and 12 East, San Bernardino Base and Meridian, San Bernardino County, California: San Francisco, California., Southern Pacific Company, unpublished report and 1:24,000-scale map, 18 p.

Glazner, A.F., & Bartley, J.M., 1990, Early Miocene dome emplacement, diking, and limited tectonism in the northern Marble Mountains, eastern Mojave Desert, California: Santa Ana, CA., South Coast Geological Society Guidebook, 9 p.

Hamilton, W., & Myers,W.B., 1966, Cenozoic tectonics of the western United States: Reviews of Geophysics, v.4, p. 509-549

Howard, K.A., Kilburn, J.E., Simpson, R.W., Fitzgibbon, T.T., Detra, D.E., Raines, G.L., & Sabine, C., 1987, Mineral Resources of the Bristol/Granite Mountains Wilderness Study Area, San Bernardino County, California: U.S. Geological Survey Bulletin 1712-C, 18 p.

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Laird, R.T., 1959, Geology and mineral resources of Township 10 North, Ranges 9 and 10 East, San Bernardino Base and Meridian, San Bernardino County, California: San Francisco, California., Southern Pacific Company, unpublished report and 1:24,000-scale map, 28 p.

Appendix B

South Bristol Mountains fault zone:

The South Bristol Mountains fault zone has been mapped along the southwestern flank of the southern Bristol Mountains with a trace of over 25 mi (40 km). It is reported to have undergone as much as 4 mi (6.5 km) of right lateral slip, with movement as young as late Pleistocene. A southeastern extension of this fault zone has been mapped to within approximately 5 mi (8 km) of the proposed Bolo Station site, and strikes directly beneath it. In accordance with the definitions of the California Public Resources Code, these structures are considered "potentially active".

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Miller, D.M., in press 1993, Cenozoic Deposits in the Lava Hills and Southern Bristol Mountains, Southeastern California: in Sherrod, D.R. and Nielson, J.E., eds., Tertiary stratigraphy of highly extended terranes, California, Arizona, and Nevada: U.S. Geological Survey Bulletin 2053

Appendix C

Broadwell Lake fault zone:

The Broadwell Lake fault zone is a northwest trending system of several parallel faults. This fault zone has a mapped strike length of approximately 25 mi (40 km), and is reported to have have undergone as much as 4 mi (6 km) of right lateral slip. The Broadwell Lake fault zone cuts alluvium reported to be early Pleistocene in age. It has been mapped to within approximately 10 mi (16 km) of the proposed Bolo Station site. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Ford, J.P., Dokka, R.K., Crippen, R.E. & Blom, R.G., 1990, Faults in the Mojave Desert, California, as revealed on enhanced Landsat images: Science, v.248, p. 1000-1003

Ford, J.P., Dokka, R.K., & Blom, R.G., 1990, Undocumented faults revealed in multisensor image analysis, Mojave Desert, California, U.S.A., in Remote sensing, an operational technology for the mining and petroleum industries, Proceedings of the 1990 conference: London, Institute of Mining and Metallurgy Proceedings, p. 27-33

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Kupfer, D.H., & Bassett, A.M., 1962, Geologic reconnaissance map of part of the southeastern Mojave Desert, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-205, scale 1:125,000

S-24

Appendix D

Ludlow fault zone:

The Ludlow fault zone is a major northwest trending structure, located approximately 15 miles (24 km) west of the proposed Bolo Station site. It has a mapped strike length of over 50 mi (80 km), and is reported to have undergone right lateral slip of over 4 miles (6 km). The Ludlow fault zone has displaced alluvium as young as late Pleistocene. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Bassett, A.M., & Kupfer,D.H., 1964, A geologic reconnaissance in the southeastern Mojave Desert, California; California Division of Mines and Geology Special Report 83, 43 p.

Dibblee,T.W., Jr., 1967, Geologic map of the Ludlow quadrangle, San Bernardino County, California: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-477, scale 1:62,500

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Jennings, C.W., 1992, Preliminary Fault Activity Map of California: California Division of Mines and Geology, Open-file Report 92-03, scale 1:750,000

Kupfer, D.H., & Bassett, A.M., 1962, Geologic reconnaissance map of part of the southeastern Mojave Desert, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-205, scale 1:125,000

S-24

Appendix E

Cleghorn Lakes fault zone:

The Cleghorn Lakes fault zone is expressed in surface outcrops and in geophysical data with a strike length of at least 16 mi (25 km). Some investigators suggest that this fault zone is the southern continuation of the Ludlow fault zone. Offset lithologic units suggest right lateral slip of up to 2 mi (3 km), with movement as young as late Pleistocene. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Bassett, A.M., & Kupfer, D.H, 1964, A geologic reconnaissance in the southeastern Mojave Desert, California; California Division of Mines and Geology Special Report 83, 43 p.

Bishop, C.C., 1964, Needles Sheet, Geologic Map of California: Sacramento, CA, California Division of Mines and Geology, scale 1:250,000

Howard, K.A., & John, B.E., 1984, Geologic map of the Sheep Hole - Cadiz Wilderness Study Area (CDCA-305), San Bernardino County, California: U.S. Geological Survey Map MR-1615-A, scale 1:62,500

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Jagiello, K., Christie, J.M., & Blom, R.G., 1992, Horizontal Separation of Major Late Cenozoic Strike-slip Faults in the Twentynine Palms Region, Mojave Desert, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p.48-53

Jennings, C.W., 1992, Preliminary Fault Activity Map of California: California Division of Mines and Geology, Open-file Report 92-03, scale 1:750,000

Kupfer, D.H., & Bassett, A.M., 1962, Geologic reconnaissance map of part of the southeastern Mojave Desert, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-205, scale 1:125,000

Simpson, R.W., Bracken, R.E., & Stierman, D.J., 1984, Aeromagnetic, Bouger gravity, and interpretation maps of the Sheep Hole-Cadiz Wilderness Study Area, San Bernardino County, California: U.S. Geological Survey Map MF-1615-B, 4 sheets, 1:62,500 scale

Appendix F

Sheep Hole fault zone:

The Sheep Hole fault zone is expressed in surface outcrops and in geophysical data with a strike length of over 22 mi (35 km). This fault zone is reported to have undergone as much as 0.75 mi (1.2 km) of right lateral slip, with movement as young as early Pleistocene. It is located approximately 15 mi (24 km) southwest of the proposed Bolo Station site. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Bassett, A.M., & Kupfer, D.H, 1964, A geologic reconnaissance in the southeastern Mojave Desert, California; California Division of Mines and Geology Special Report 83, 43 p.

Hope, R.A., 1969, The Blue Cut fault, southeastern California, in Geological Survey Research 1969: U.S. Geological Survey Professional Paper 650-D, p. 116-121

Howard, K.A., & Allen, C.M., 1988, Geologic map of the southern part of the Dale Lake 15-minute quadrangle, San Bernardino and Riverside Counties, California: U.S. Geological Survey Open-file report 88-534, scale 1:62,500

Howard, K.A., & John, B.E., 1984, Geologic map of the Sheep Hole - Cadiz Wilderness Study Area (CDCA-305), San Bernardino County, California: U.S. Geological Survey Map MR-1615-A, scale 1:62,500

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Jagiello, K., Christie, J.M., & Blom, R.G., 1992, Horizontal Separation of Major Late Cenozoic Strike-slip Faults in the Twentynine Palms Region, Mojave Desert, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p.48-53

Jennings, C.W., 1992, Preliminary Fault Activity Map of California: California Division of Mines and Geology, Open-file Report 92-03, scale 1:750,000

Kupfer, D.H., & Bassett, A.M., 1962, Geologic reconnaissance map of part of the southeastern Mojave Desert, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-205, scale 1:125,000

Simpson, R.W., Bracken, R.E., & Stierman, D.J., 1984, Aeromagnetic, Bouger gravity, and interpretation maps of the Sheep Hole-Cadiz Wilderness Study Area, San Bernardino County, California: U.S. Geological Survey Map MF-1615-B, 4 sheets, 1:62,500 scale

Woodward-McNeil and Associates, 1974, Geology and Seismology, in Information concerning site characteristics, Vidal Nuclear Generating Station: Southern California Edison Company, Vol. 2, Section 2.5, 242 p.

Appendix G

Dry Lakes fault zone:

The Dry Lakes fault zone is expressed in both surface outcrops and geophysical data, and has a mapped strike length of approximately 22 mi (35 km). It is reported to have undergone as much as 7 mi (11 km) of right lateral slip, with movement as young as early Pleistocene. The Dry Lakes fault zone trends toward the south-central margin of Bristol Lake, approximately 8 m (13 km) southwest of the proposed Bolo Station site. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Howard, K.A., & John, B.E., 1984, Geologic map of the Sheep Hole - Cadiz Wilderness Study Area (CDCA-305), San Bernardino County, California: U.S. Geological Survey Map MR-1615-A, scale 1:62,500

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Jagiello, K., Christie, J.M., & Blom, R.G., 1992, Horizontal Separation of Major Late Cenozoic Strike-slip Faults in the Twentynine Palms Region, Mojave Desert, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p.48-53

Miller, D.M, Howard, K.A., & John, B.E., 1982, Preliminary geology of the Bristol Lake region, Mojave Desert, California, in Cooper, J.D., Compiler, Geologic excursions in the Mojave Desert, Volume and Guidebook: Geological Society of America Cordilleran Section 78th Annual Meeting, Fullerton, California, California State University, p. 91-100

Simpson, R.W., Bracken, R.E., & Stierman, D.J., 1984, Aeromagnetic, Bouger gravity, and interpretation maps of the Sheep Hole-Cadiz Wilderness Study Area, San Bernardino County, California: U.S. Geological Survey Map MF-1615-B, 4 sheets, 1:62,500 scale

Appendix H

Calumet fault zone:

The Calumet fault zone is formed by several parallel northwest trending faults. This zone has a mapped strike length of approximately 19 mi (30 km), and trends toward the southern end of Bristol Lake, approximately 8 mi (13 km) south of the proposed Bolo Station site. It is reported to have undergone early Pleistocene movement. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Howard, K.A., & John, B.E., 1984, Geologic map of the Sheep Hole - Cadiz Wilderness Study Area (CDCA-305), San Bernardino County, California: U.S. Geological Survey Map MR-1615-A, scale 1:62,500

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Kupfer, D.H., & Bassett, A.M., 1962, Geologic reconnaissance map of part of the southeastern Mojave Desert, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-205, scale 1:125,000

Richard, S.M., & Dokka, R.K., 1992, Geology of the Packard Well Fault zone, Southeastern California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 71-74

Simpson, R.W., Bracken, R.E., & Stierman, D.J., 1984, Aeromagnetic, Bouger gravity, and interpretation maps of the Sheep Hole-Cadiz Wilderness Study Area, San Bernardino County, California: U.S. Geological Survey Map MF-1615-B, 4 sheets, 1:62,500 scale

Appendix I

Cadiz Valley fault zone:

The Cadiz Valley fault zone has pronounced expression in both gravity & magnetic surveys as several distinct, northwest trending structures. It is regionally expressed as part of the "Bristol-Danby trough". The Cadiz Valley fault zone has a strike length of at least 25 mi (40 km), and may merge with the Bristol-Granite Mountains fault zone, and/or the South Bristol Mountains fault zone to the north. Right-lateral slip of as much as 16 mi (25 km) have been postulated by some investigators. Gravity and magnetic data suggest that the northern continuation of the Cadiz Valley fault zone may directly underlie the proposed Bolo Station site, and that eastern members of this zone may directly underlie the Cadiz Valley Alternative site. Slickensides recovered from drill holes in Cadiz Lake suggest the the fault zone cuts early Pleistocene sediments. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Bassett, A.M., & Kupfer, D.H, 1964, A geologic reconnaissance in the southeastern Mojave Desert, California; California Division of Mines and Geology Special Report 83, 43 p.

Bassett, A.M., Kupfer, D.H., & Barstow, F.C., 1959, Core logs from Bristol, Cadiz, and Danby Lakes, San Bernardino County California: U.S. Geological Survey Bulletin 1045-D, p. 97-138

Carr, W.J., 1991, A contribution to the structural history of the Vidal-Parker region, California and Arizona: U.S. Geological Survey Professional Paper 1430, 40 p.

Gutman, S.I., 1985, Depth to Basement Calculated from Gravity and Magnetic Data, Proprietary report to Cadiz Land Company, Inc., map scale 1:48,000

Howard, K.A., & John, B.E., 1984, Geologic map of the Sheep Hole - Cadiz Wilderness Study Area (CDCA-305), San Bernardino County, California: U.S. Geological Survey Map MR-1615-A, scale 1:62,500

Howard, K.A., Horringa, E.D., Miller, D.M., & Stone P., 1989, Geologic Map of the Eastern Parts of the Cadiz Lake and Cadiz Valley 15-minute Quadrangles, San Bernardino and Riverside Counties, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-2086, scale 1:62,500

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Jachens, R.C., & Howard, K.A., 1992, Bristol Lake Basin - A Deep Sedimentary Basin along the Bristol-Danby Trough, Mojave Desert, in Reynolds, R.E., compiler, Old Routes to the Colorado: Redlands, CA., San Bernardino County Museum Association Special Publication 92-2, p. 57-59

Kupfer, D.H., & Bassett, A.M., 1962, Geologic reconnaissance map of part of the southeastern Mojave Desert, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-205, scale 1:125,000

Purcell,C., & Miller, D.G., 1980, Grabens along the lower Colorado River, California and Arizona, in Fife, D.L., and Brown, A.R., Geology and mineral wealth of the California desert: Santa Ana, CA., South Coast Geological Society, p. 475-484.

Richard, S.M., & Dokka, R.K., 1992, Geology of the Packard Well Fault zone, Southeastern California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 71-74

Rosen, M.R., 1989, Sedimentologic, geochemical, and hydrologic evolution of an intracontinental, closed-basin playa (Bristol Dry Lake, CA): A model for playa development and its implications for paleoclimate [Ph.D. Dissertation]: Austin, University of Texas, 266 p.

Simpson, R.W., Bracken, R.E., & Stierman, D.J., 1984, Aeromagnetic, Bouger gravity, and interpretation maps of the Sheep Hole-Cadiz Wilderness Study Area, San Bernardino County, California: U.S. Geological Survey Map MF-1615-B, 4 sheets, 1:62,500 scale

Appendix J

Bristol Lake fault zones:

The structural control of Bristol Lake basin is expressed at the surface by at least eight faults which have been mapped as cutting Holocene lake sediments and basalt flows from Amboy crater. The Amboy crater complex is estimated by several investigators to be as as young as 6,000 years. One fault mapped as cutting an Amboy crater flow is located within approximately 5 mi (8 km) of the proposed Bolo Station site, and strikes directly beneath the site. Several different lines of evidence have been cited by investigators to suggest that structural subsidence of Bristol Lake basin is currently active. In accordance with the definitions of the California Public Resources Code, the Bristol Lake fault zones are considered "active".

Bassett, A.M., & Kupfer,D.H., 1964, A geologic reconnaissance in the southeastern Mojave Desert, California; California Division of Mines and Geology Special Report 83, 43 p.

Bassett, A.M., Kupfer, D.H., & Barstow, F.C., 1959, Core logs from Bristol, Cadiz, and Danby Lakes, San Bernardino County California: U.S. Geological Survey Bulletin 1045-D, p. 97-138

Glazner, A.F., Farmer, G.L., Hughes, W.T., Wooden, J.L., & Pickthorn, W., 1991, Contamination of basaltic magma by mafic crust at Amboy and Pisgah craters, Mojave Desert, California: Journal of Geophysical Research, v. 96, p. 13673-13691.

Gutman, S.I., 1985, Depth to Basement Calculated from Gravity and Magnetic Data, Proprietary report to Cadiz Land Company, Inc., map scale 1:48,000

Hazlett, R., 1992, Some Thoughts on the Development of Amboy Crater, in Reynolds, R.E., compiler, Old Routes to the Colorado: Redlands, CA., San Bernardino County Museum Association Special Publication 92-2, p. 71-73

Howard, K.A., & Miller, D.M., 1992, Late Cenozoic Faulting at the Boundary between the Mojave and Sonoran Blocks: Bristol Lake Area, California, in Richard, S.M., ed., Deformation associated with the Neogene Eastern California Shear Zone, southwestern Arizona and southeastern California: Redlands, CA., San Bernardino County Museums Special Publication 92-1, p. 37-47

Jachens, R.C., & Howard, K.A., 1992, Bristol Lake Basin - A Deep Sedimentary Basin along the Bristol-Danby Trough, Mojave Desert, in Reynolds, R.E., compiler, Old Routes to the Colorado: Redlands, CA., San Bernardino County Museum Association Special Publication 92-2, p. 57-59

Kupfer, D.H., & Bassett, A.M., 1962, Geologic reconnaissance map of part of the southeastern Mojave Desert, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-205, scale 1:125,000

Miller, D.M., in press 1993, Cenozoic deposits in the Lava Hills and southern Bristol Mountains, southeastern California, in Sherrod, D.R. and Nielson, J.E., eds., Tertiary stratigraphy of highly extended terranes, California, Arizona, and Nevada: U.S. Geological Survey Bulletin 2053

Parker, R.B., 1963, Recent Volcanism at Amboy Crater, San Bernardino County, California: California Division of Mines and Geology Special Report 76, 22 p.

Rosen, M.R., 1989, Sedimentologic, geochemical, and hydrologic evolution of an intracontinental, closed-basin playa (Bristol Dry Lake, CA): A model for playa development and its implications for paleoclimate [Ph.D. Dissertation]: Austin, University of Texas, 266 p.

Simpson, R.W., Bracken, R.E., & Stierman, D.J., 1984, Aeromagnetic, Bouger gravity, and interpretation maps of the Sheep Hole-Cadiz Wilderness Study Area, San Bernardino County, California: U.S. Geological Survey Map MF-1615-B, 4 sheets, 1:62,500 scale

Sugira, R., & Sabins, F., 1980, The evaluation of 0.3-cm-wavelength radar for mapping surface deposits in the Bristol Lake/Granite Mountain area, Mojave Desert, California, in Radar Geology: An assessment, Report of the Radar Geology Workshop, Snowmass, Colorado, July 16-20, 1979: Pasadena, California, Jet Propulsion Laboratory, National Aeronautics and Space Administration, p. 439-456

Appendix K

Fenner Wash fault zone:

The Fenner Wash fault zone is a northeast trending system of oblique slip normal faults which forms the half-graben structure of Fenner gap. It is expressed in gravity and magnetic surveys and in surface outcrops along the northwestern flank of the Ship Mountains. It has a mapped strike length of approximately 15 mi (24 km). Although additional investigation will be required to determine with certainty the youngest movement on this fault zone, several lines of evidence suggest that it is has undergone movement during the Pleistocene. In accordance with the definitions of the California Public Resources Code, this structure is considered "potentially active".

Cadiz Land Company, Inc., 1984-1994, Reconnaissance Geological Mapping: proprietary data

Gutman, S.I., 1985, Depth to Basement Calculated from Gravity and Magnetic Data, Proprietary report to Cadiz Land Company, Inc., map scale 1:48,000

Karlstrom, K.E., Miller, C.F., Kingsbury, J.A., and Wooden, J.L., 1993, Pluton emplacement along an active ductile thrust zone, Piute Mountains, southeastern California: Interaction between deformational and solidification processes: Geological Society of America Bulletin, v. 105, p. 213-230

DOCUMENT S-24
CADIZ LAND COMPANY, INC.
RESPONSE TO COMMENTS

Response S-24-1

1. The Draft EIR/EIS and Supplement evaluated CLC's proposed expansion as a cumulative project. The review was based on information available at the time of preparation of these documents and is consistent with the final CLC expansion project as approved (i.e., expanded agricultural development to 9,600 acres). The potential cumulative impacts associated with the expansion in relation to the proposed landfill included ground water, vegetation, wildlife, visual and socioeconomic effects. Available data from the Draft EIR on the proposed CLC expansion was also discussed in the Supplement. Specifically, Sections 4.2 and 5.2 of the Supplement updated the ground water analysis to include the anticipated withdrawal from the CLC operation.

2. CEQA requires that an EIR discuss cumulative impacts for "reasonably anticipated future projects". The analysis in the Rail•Cycle Draft EIR/EIS and Supplement complies with the requirements of CEQA in reviewing available information at the time of preparation of the documents. There is no indication that the impact analyses for the proposed project and cumulative projects would be altered due to the final approval of the CLC expansion.

Response S-24-2

1. The January 1994 Memorandum of Understanding (MOU) between CLC and the Mojave Water Agency referenced in this comment occurred subsequent to the preparation and distribution of both the Draft EIR/EIS and Supplement. It is a speculative "project" identified after the CEQA/NEPA evaluation of the proposed action, and therefore, was not a "reasonably anticipated future project" for the Rail•Cycle EIR/EIS. It cannot be expected that analysis of a proposed project continually update the status of related projects beyond the preparation of the EIR/EIS.

Response S-24-3

1. Complete responses to CLC's letter regarding the Draft EIR/EIS are included in Chapter 2.0 of this Final EIR/EIS, Document 035. In this chapter (i.e., Chapter 3.0), a summary response is provided for those comments that reiterated the CLC's issues regarding the Draft EIR/EIS. Specific responses to new issues raised by the CLC comment letter on the Supplement follow this response.

2. While not stated by this comment, it is assumed the "...potential contamination of a municipal water supply..." is in reference to the recent MOU between CLC and the Mojave Water Agency. Ground water flowing under the proposed site is directly upgradient from the brine interface. Therefore, there is not a potential for other fresh water uses in the Bristol Basin to be affected. Nevertheless, the proposed landfill would be designed and operated to protect ground water as if it were drinking water. The proposed landfill's double-composite liner system, from a leakage perspective, is superior to both the Subtitle D and California standards for liners.

3. The direction of ground water flow at the proposed site is south, towards Bristol Dry Lake. CLC's land and crops are located east of the proposed site, and CLC's wells are located approximately five miles east of the site. Due to the direction of ground water flow, CLC land crops and the water beneath CLC's land could not be affected by materials deposited at the proposed landfill.

Response S-24-4

1. Sections 4.2.2 and 6.2.4 of the Supplement discuss the proposed expansion and land holdings of CLC. The mapped location of CLC's land holdings, as included in Figure 1 of this comment letter and reproduced in this Final EIR/EIS, fully discloses the location of the company's land holdings relative to the Bolo Station and Cadiz Valley Alternative sites.

2. As discussed in Chapter 2.0 of this Final EIR/EIS, Document 035, Response 035-4, CEQA and NEPA require that an EIR/EIS consider alternative sites, even if the applicant does not own the alternative site. The Draft EIR/EIS indicated that the Cadiz Valley Alternative site is not preferable to the proposed project site; if it had, the ability of Rail•Cycle to acquire lands at the alternative location, including CLC lands, would be an appropriate consideration in the decisions makers' deliberations regarding the project.

Response S-24-5

1. A summary overview of faulting in the vicinity of the Bolo Station site is included as Table E.2, Appendix E of this Final EIR/EIS. As summarized in the table, the Ludlow Fault, located approximately 15 miles from the Bolo Station site, represents the closest potentially active fault. The overview supports the findings of the Draft EIR/EIS and Supplement, which concluded that an earthquake located on the Ludlow Fault would yield the largest peak horizontal ground acceleration during MPE and MCE events at the site (i.e., 0.09g and 0.20g, respectively). Further, the stability analysis report for the proposed project indicates that a theoretical 0.35g acceleration would not cause instability or unacceptable deformations of landfill elements (Rust, 1993a).

Response S-24-6

1. A review of the literature cited in this comment letter was conducted for this Final EIR/EIS (see Table E.1, Appendix E for a complete list of geological reports and maps reviewed). Based on the review, Table E.2, Appendix E, provides a summary of faulting in the vicinity of the proposed project site. In addition, Figure 5.2.1 of the Draft EIR/EIS has been refined to highlight the faults in the proposed area. This refined figure is included in Chapter 1.0 of this Final EIR/EIS.

2. Based on the above review, faults in the vicinity, including those identified through borings into Cadiz and Bristol Lake sediments, have been verified as generally cutting lower Pleistocene deposits while upper Pleistocene and/or Holocene deposits overlying the fault traces are not deformed. Thus, per criteria for a Class III landfill as established in CCR Title 23, Chapter 15, these faults are not "active" and pose no adverse condition for the project.

Response S-24-7

1. It has been established that faults in the western part of the "Eastern California Shear Zone" cut Holocene deposits; whereas faults in the eastern portion of this shear zone last moved in early Pleistocene or possibly Pliocene time (see Table E.2, Appendix E of this Final EIR/EIS).

Response S-24-8

1. As noted in Responses S-24-5 and S-24-6, the proposed landfill is not located on any Holocene fault. The landfill has been designed in accordance with Subtitle D and CCR Title 23 to withstand the maximum horizontal acceleration expected from a seismic event that could affect the site. As discussed in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, the proposed site is not located in an unstable area as defined by Subtitle D.

Response S-24-9

1. As noted in Responses S-24-5 and S-24-6, the proposed landfill is not located on any Holocene fault. The landfill has been designed in accordance with Subtitle D and CCR Title 23 to withstand the maximum horizontal acceleration expected from a seismic event that could affect the site. As discussed in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, the proposed site is not located in an unstable area as defined by Subtitle D.

Response S-24-10

1. Maps with plottings or recorded/historic earthquake epicenters by S.K. Grotter and others have been reviewed for preparation of the Draft EIR/EIS, Supplement, and this Final EIR/EIS (see Table E.1, Appendix E for list of references). Number/density and magnitude of epicenters decrease dramatically between the Ludlow Fault and the project site. East of the project site the number of epicenters is limited.

Response S-24-11

1. The RWQCB request for further verification of the lack of site-specific active or potentially active faults is a typical exercise of the permitting process. The additional geophysical survey and exploration work is documented in Section 4.1 of the Supplement. Moreover, the review of geologic mapping and seismic data referenced in letters received on the Draft EIR/EIS and Supplement support the findings of this Final EIR/EIS, and the conclusion that there are no active faults within or in the vicinity of the Bolo Station site (see Appendix E of this Final EIR/EIS).

Response S-24-12

1. As discussed in the previous response, the seismic analysis as described in the Draft EIR/EIS and Supplement, together with the supporting evaluation included in this Final EIR/EIS, adequately describe the seismic risk at the Bolo Station site. Moreover, it has been concluded that the proposed landfill would not be affected by seismic activities. As specified in response

S-24-5, an earthquake located on the Ludlow Fault would yield the largest peak horizontal ground acceleration during MPE and MCE events at the site (i.e., 0.09g and 0.20g, respectively). Further, the stability analysis report for the proposed project indicates that a theoretical 0.35g acceleration would not cause instability or unacceptable deformations of landfill elements (Rust, 1993d).

2. As required by the SWRCB and the County, logging of landfill cell excavations would provide assurances that geologic discontinuities do not extend into the site, and allow design modifications, if necessary. This measure is included in the Mitigation Monitoring and Compliance Program for the proposed project.

Response S-24-13

1. The results of the trenching in conjunction with other information from the seismic investigations support the conclusion that there are no active faults within the vicinity of the Bolo Station site. It is correct that the trenching may not conclusively demonstrate that Lineament A does not extend to the proposed site. As recommended by the SWRCB and County Geologist, logging of cell excavation would provide the necessary data to confirm the absence of this feature or other discontinuities beneath the site.

Response S-24-14

1. A detailed evaluation of liquefaction potential was performed and it was concluded that liquefiable conditions do not exist in the site subsurface (Jacobs, 1991b). Section 5.2.1.1 of the Draft EIR/EIS summarize Jacob's findings.

Response S-24-15

1. A seismic evaluation following "state-of-the-practice" procedures was performed for both the Bolo Station and Cadiz site in compliance with state regulations. Faults within the region were identified and assigned magnitude for both MPE and MCE events. The stability analysis performed for the site used an acceleration value of 0.35g, significantly higher than the highest predicted acceleration values of 0.09g and 0.20g for M6.0 (MPE) and M7.5 (MCE), respectively (Rust, 1993d). The analysis results indicate no predicted instabilities or unacceptable deformation of landfill elements.

Response S-24-16

1. The maximum settlement of 15.6 feet was conservatively estimated for the southwest corner of the site, at which the largest settlement would be anticipated. The soils in this portion of the site are cohesive (i.e., clays and silts) and are more prone to consolidation than the cohesionless gravel, sand, and silty-sand which exist in the northern portion of the site. The ATSF rail line is located within the northern portion of the site characterized by the near absence of cohesive soils (see Section 4.2.2.1.2 of the Draft EIR/EIS). Based on conservative analysis, the maximum settlement within the landfill footprint at the closest location to the rail lines, due to both landfilling and ground water pumping, was estimated to be 0.39 feet (Jacobs, 1993b). This settlement is estimated to occur over a period of 130 years.

2. Negligible settlement would be anticipated at the rail line which is located approximately 700 feet north of the landfill footprint at the referenced location. The proposed project, therefore, would not result in land subsidence which would impact either the railroad or the pipeline.

Response S-24-17

1. The ground water information included in CLC's letter regarding the Draft EIR/EIS was presented in the Supplement, Section 4.2.2.1.1. The Supplement concludes that even at the 20,000 acre-feet per year recharge estimated by CLC, a net 10,000 acre-feet per year would be withdrawn from the basin for agricultural use at the estimated annual use of 30,000 acre-feet per year for CLCs expanded operation. Sections 5.2.1.2.1 and 6.2.3.2 of the Supplement, therefore, concluded that cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin.

2. The CLC expansion will result in substantial ground water withdrawal that exceeds the recharge rate of the Bristol Basin. Therefore, the County expects that the Mojave Water Agency, as the lead agency for the potential additional withdrawal of ground water proposed as part of the MOU with CLC, will consider the impacts of this withdrawal in an appropriate CEQA document.

Response S-24-18

1. It is correct, as noted in this comment, that the SWRCB classifies water with TDS less than

3,000 mg/L to be waters of the state and a potential municipal or domestic water supply. It is unclear, however, to what regulation or requirement this comment is referring when stating that it is illegal to locate a landfill directly over a potential municipal or domestic water supply. Neither federal (Subtitle D) nor state (CCR Title 23) regulations include this siting criteria for landfills.

Response S-24-19

1. As discussed in Section 5.2.2.4 of the Supplement, the ground water Detection Monitoring Program will conform to CCR Title 23, Subtitle D, and the requirements of the RWQCB that assume that ground water below the proposed landfill is of potable quality. No difference exists between the ground water monitoring program required at this facility, which is located over both the potable and nonpotable water as defined by the SWRCB, and a facility that is located over an aquifer used for drinking water purposes.

2. The proposed landfill, therefore, would not endanger the potential water supply, and impacts need not be evaluated further to investigate potential impacts associated with CLC's speculative ground water project with the Mojave Water Agency.

Response S-24-20

1. Responses to the comments received on the Draft EIR/EIS, pages 9-17 of this commenter's previous letter, are included in Chapter 2.0 of this Final EIR/EIS as Document 035. As noted in the previous response, no additional mitigation measures are required for the proposed Bolo Station Landfill to protect the ground water resource beneath the site.

Response S-24-21

1. Responses to the previous comments regarding this issue, as included in this commenter's letter on the Draft EIR/EIS, are provided in Chapter 2.0, Responses 035-23 and 035-24, of this Final EIR/EIS. The main channel of the Orange Blossom Wash runs several miles east of the proposed site and is intercepted by Chambless Wash, which extends toward the southeasterly corner of the site (Section 22). Landfill development in the area of Chambless Wash, primarily located in the western half of Section 22, is not projected to occur for 25 to 30 years after project startup. Consistent with requirements of the County Land Development Department, the following mitigation measure has been included by this Final EIR/EIS (see Table S.3) to mitigate the potential impacts should high velocity flows occur in the Chambless Wash:

   - In consultation with the County Land Development Department, Rail•Cycle shall monitor and map drainage flows in the affected area of Chambless Wash. Based on this monitoring and in consultation with the County Land Development Department, protective measures, if any, would be identified prior to developing this portion of the site.

2. The proposed alternative site is located on the crest of an alluvial plain and would not be subject to flooding by Fenner Valley Wash in the event of a 100-year flood.

Response S-24-22

1. The previous floodplain calculations prepared by Jacobs (1990) did not use the various precipitation figures for different areas as referenced in this comment (i.e., 2.5, 3.0, and 3.5-4.5 inches). The conservative value of 4.5 inches (as established for the surrounding mountains) was used for the entire tributary area to estimate runoff from the 100-year, 24-hour storm event.

2. The hydrologic and hydraulic analyses to identify required drainage improvements were refined subsequent to the Jacob's 1990 study and subsequent to preparation of the Supplement (Rust, 1994). The analysis, which was based on the procedures included in the County's Hydrology Manual, is in accordance with the state standards in CCR Title 23, Chapter 15, Article 4, which requires that Class III landfills be designed using the 100-year, 24-hour storm event.

3. The 100-year, 24-hour storm event provides a conservative analysis of flooding issues for the proposed Bolo Station Landfill, including the potential risk of inundation due to flooding of the Bristol Dry Lake. Contrary to the suggestion made by this comment, the 100-year, 24-hour storm analysis is more conservative than an evaluation based on extreme annual precipitation. Infiltration and evaporation would minimize the level of water in the Bristol Dry Lake during any given year (i.e., the individual storms occurring over the year would not be cumulative).

Response S-24-23

1. As indicated in this comment, it is acknowledged that a return period of over 100-years is appropriate for the design of some structures, such as dams and levees. The Probable Maximum Precipitation (PMP) design basis used by the California Department of Water Resources (CDWR) for the design of dams takes into account the high risks associated with a potential breach of a dam. Dam failure could result in loss of life and substantial property damage to downgradient residents. However, the periodic accumulation of water in the Bristol Dry Lake is not held back by a dam and their is no risk of a catastrophic release of water from the dry lake.

2. The design standard for Class III landfills, a 100-year, 24-hour storm, is adequate for the proposed action. This standard is implemented with the knowledge that a greater storm event may occur over the life of the project. A storm of greater magnitude may result in erosion damage to the landfill cover system, but should not pose a threat to ground water or surface water quality. Moreover, such damage could be repaired following the storm.

Response S-24-24

1. The analysis of the potential rise of the Bristol Dry Lake set forth in this comment is based on several assumptions and parameters which are not appropriate:
   - The 85 percent runoff coefficient used is too high for analysis of runoff, due to extreme annual precipitation. The runoff coefficient for annual precipitation would be much lower than that used for the 100-year, 24-hour storm because of the multitude of small event storms which would infiltrate into the ground. The 85 percent runoff coefficient (as used for the Jacob's 1990 site analysis) was conservative even for the 100-year, 24-hour storm event, and would be expected to be substantially lower for the large drainage basin for the Bristol Dry Lake.
   - Rainfall data recorded at Mitchell Caverns (4,306 feet above mean sea level) are not representative of the Bristol Dry Lake drainage basin in which the majority of the area is at an elevation of less than 2,000 feet above mean sea level and would receive less rainfall.
   - The total annual precipitation does not account for pan evaporation. The annual pan evaporation for the area exceeds 150 inches (DWR, 1979).

2. The calculations as presented in this comment, therefore, substantially over-estimate the potential rise in the Bristol Dry Lake. As discussed in Responses S-24-22 and S-24-23, evaluation of a storm return period of over 100-years is not required by state (CCR Title 23) or federal (Subtitle D) regulations to assess the potential flooding impacts associated with the proposed landfill.

Response S-24-25

1. The refined hydrologic analysis conducted for the proposed landfill addresses a watershed for the proposed site comprised of 10 tributary areas and a total of over 75 square miles (Rust, 1994). As discussed in Responses S-24-22 and S-24-23, the 100-year, 24-hour storm event analysis adequately assesses potential flooding impacts. Debris flow from Orange Blossom Wash would not affect the proposed action since the Bolo Station site is not in the flowline of this wash.

2. The calculations as provided in this comment are not appropriate to estimate flood erosion impacts. Estimates are more appropriately based on flood flows (cubic feet/second) as opposed to volumes (acre feet). Moreover, the County's Hydrology Manual on which the analysis for the proposed project was based, provides a more refined, up-to-date methodology and data base for the Bolo Station site than the CDWR data referenced in this comment. The County's Hydrology Manual was published in 1986 reflecting current rainfall station data, compared to the CDWR data which was compiled for a 1976 report.

3. The prediction of massive landfill failure and catastrophic surface and ground water pollution due to the proposed project is not supported by the analysis as prepared pursuant to the County's Hydrology Manual, the requirements of CCR Title 23, or in consultation with the County Land Development Department.

Response S-24-26

1. The storms and resultant damages occurring over 30 years ago, as referenced in this comment, are not relevant to the proposed action. Drainage improvements in this area have been constructed since the 1932 and 1959 storms. Moreover, the hydrologic and hydraulic analysis conducted for the proposed action details improvements as required to protect the landfill from flooding impacts (Rust, 1994).

Response S-24-27

1. Previous washouts of National Trails Highway are not relevant to the evaluation of potential flooding impacts at the proposed Bolo Station Landfill. Design standards based on the County's Hydrology Manual and applied to the proposed landfill are more conservative than design standards prior to the construction of this highway and the storm events as referenced in this comment.

Response S-24-28

1. Run-on and runoff volumes for the 100-year, 24-hour storm event are provided in the hydrologic and hydraulic analysis report prepared for the proposed action (Rust, 1994). The report also details the required improvements, including sizes, which are planned to accommodate surface flows. The report is available for review at the San Bernardino County Planning Department and the BLM, Desert District Area Office in Riverside, California.

Response S-24-29

1. Please see Responses S-24-22 through S-24-28 for direct responses regarding flooding and erosion issues raised in this comment. For a review of the detailed method and parameters used in the hydrologic analysis, please refer to the *Drainage Report for Bolo Station Landfill* (Rust, 1994) which is available for public review at the San Bernardino County Planning Department and the BLM, Desert District Area Office in Riverside California.

Response S-24-30

1. Refer to Response 035-26, Chapter 2.0 of this Final EIR/EIS for a full discussion of the concerns raised by CLC's previous letter regarding disease vectors. Based on the findings of the report *Agricultural Impact Report - The Potential Impact on Local Agriculture From the Proposed Rail•Cycle Bolo Station Landfill* (Barnes, 1993), and the proposed mitigation measures to minimize agricultural impacts, the marketability of CLC produce is not expected to be affected by development and operation of the proposed landfill.

Response S-24-31

1. The issues regarding potential project impacts to air quality, noise, transportation and land use as raised in this commenter's letter regarding the Draft EIR/EIS, are thoroughly addressed in Document 035, Chapter 2.0 of this Final EIR/EIS (see Responses 035-34 through 035-44).

Response S-24-32

1. As detailed in the responses to CLCs letters on both the Draft EIR/EIS and Supplement included in this Final EIR/EIS, the potential impacts to the agricultural operation have been addressed, and mitigation measures provided, as required.

Response S-24-33

1. The Mitigation Monitoring and Compliance Program for the proposed project has been prepared and will be adopted by the County Board of Supervisors.

Response S-24-34

1. The responses regarding the potential for cumulative impacts which may affect CLC operations, as individually identified in the CLC letter regarding the Draft EIR/EIS, are included as Responses 035-52 through 035-60, Chapter 2.0 of this Final EIR/EIS. As discussed in Response S-24-19, the ground water monitoring program would conform to CCR Title 23, Subtitle D, and the requirements of the RWQCB which assume that ground water below the proposed landfill is of potable quality. No additional evaluation or mitigation, therefore, would be required to protect this resource.

2. As noted in Response 035-62, Chapter 2.0 of this Final EIR/EIS, potential mitigation measures for cumulative impacts are assessed within the mitigation sections for the proposed project, as the relevant impacts are also identified as resulting from the project alone.

Response S-24-35

1. A thorough response to issues raised by this commenter regarding the adequacy of alternative analysis in the Draft EIR/EIS is provided in Document 035, Chapter 2.0 of this Final EIR/EIS (see Responses 035-63 through 035-67). Additionally, a clarified discussion of the criteria used to select and evaluate potential offsite alternatives for the proposed action was included as Section 3.3.2 of the Supplement.

Response S-24-36

1. Prior to making their decisions regarding the proposed project, the County Board of Supervisors will consider the complete administrative record

for the project, which includes, but is not limited to, the following:

- The Draft EIR/EIS and public and agency comments on that document.
- The Supplement and public and agency comments on that document.
- This Final EIR/EIS, which includes responses to public and agency comments on the Draft EIR/EIS and Supplement.
- Other information concerning the project in the public record.
- Public testimony before the County Planning Commission.
- The recommendation of the County Planning Commission.
- Public testimony before the County Board of Supervisors.

Response S-24-37

1. Rail•Cycle has continued with its design and permitting work on the proposed landfill; however, contrary to the suggestion made by the comment, significant new analysis and redesign of the proposed project has not occurred since the preparation and circulation of this Supplement. Therefore, their is no reason to recirculate the Draft EIR/EIS.

LASER

Landfill Alternatives Save Environmental Resources

Participating Organizations:
Communities United for Safe Trash Management
Foundation for the Preservation of the Santa Susana Mountains
Friends of Caballero Canyon
Friends of Pico Canyon
Friends of Towsley Canyon
Hacienda Heights Improvement Association
Kagel Canyon Civic Association
Mothers and Others Against the Dump
North Valley Coalition
Ridge Trail Park Trust
Santa Clarita Citizens' Transportation Association
Santa Clarita Civic Association
Santa Clarita Oak Conservancy
Santa Clarita Organization for Planning the Environment
Santa Clarita Valley Canyons Preservation Committee
Santa Susana Mountain Park Association
Save Our Sylmar
Save the Angeles Foundation

Founding Members:
Ed Ayres
Glenn Bailey
Rona Berger
Allan Cameron
Frank Cox
Mary Edwards
Jan Hinkston
Ann Irvine
Vera Johnson
Jill Klajic
Marsha McLean
Arlene Mead
Chip Meyer
Mike Ormsby
Karen Pearson
Lynne Plambeck
Sue Vila
Rob Zapple
Anne Ziliak

2-18-94

Randy Scott
Regional Planning Dept.
County of San Bernardino

Re: Rail-cycle Bolo Station Landfill
State Clearinghouse #91092020

Dear Mr. Scott:

LASER is a coalition of groups in Los Angeles County which support source reduction, re-use and recycling as the preferred means of solid waste management and oppose urban landfills due to their impact on water and air quality affecting large populations and their impact on what little remains of urban open space.

Thank-you for offering us the opportunity to comment on the Supplement to the Draft EIR on Bolo Station Landfill. After visiting the site and spending considerable time reading and reviewing the draft and supplement, our group would like to make to following comments:

Chapter 2 - Purpose and need.
Although our group agrees there is a need for such a project and we applaud Waste Management's efforts at siting its MRF first so that its intentions of recovering recyclables are verifiable, we are concerned about potential over capacity if this facility is sited at the requested tonnage per day and life of 100 years. Over capacity will serve to economically discourage re-use and recycling by creating an artificial "need" for waste to cover operating costs. Since re-use and recycling produce the greatest long-term benefits to society, it is important that the planning process ensure their viability. We suggest this may be done by reducing the tonnage to 12,000 per day, reducing the lifetime of the landfill to 30 years and not allowing the receipt of any recyclables on the site as a condition of approval. ①

We would like to bring to your attention that the landfill capacity shortfall which has been continuously predicted by LA County Sanitation since 1991 and is mentioned again on page 2-1 Item 5 as possibly occurring in 1993, has not occurred to date. The veracity of this coming shortfall has been put into question (see LA Times, July 1993).

Chapter 4.2 Ground Water

We believe the impacts of this project to the Bristol groundwater basin which is already in overdraft are perhaps the most disturbing. However, upon investigation, it became obvious that the most substantial part of the overdraft was caused and would continue to be caused by the Cadi Land Co.'s agricultural operations and proposed expansions thereof. Since the farming operation will have a limited life due to the eventual exhaustion of the ground water at its current rate of pumping and since a landfill and an orchard may not be compatible land uses due to the generation of dust which kills the trees, we suggest that the landfill be conditioned on reaching an agreement with CLC to reduce its operations. ②

Further, we are concerned about the question of subsidence due to groundwater drawdown and overdraft. Although the Draft EIR seems to adequately allow for subsidence in the calculations of the required separation between the groundwater basin and the landfill liner, we did not see a discussion of what kind of stress a sudden subsidence would put on the liner itself. Further, although the Draft states that settlement will be uniform within a cell, it predicts a conservative scenario of from 4.8ft. to 15.6ft(5.1-3). Could this be a source of liner failure? What if the subsidence occurred unevenly within a cell? Would the liner withstand this kind of stress? Was the weight of the garbage considered when figuring the probability of subsidence. It seemed to us that weight could increase the probability and extent of the subsidence and that there was no way of insuring the even distribution of the weight within a cell. ③

Visual impact

We believe that use of the Cadi Alternative would substantially reduce the visual impact of this project due to its closer proximity to the mountains. Thus a new mountain would be created next to other mountains rather than protruding from an existing plain and low area. ④

Biological Impact

We request that all desert tortoise avoidance and impact reduction techniques along with the education program outlined in the US Fish and Wildlife ⑤

S-25

correspondence of Aug. 4th, 1993 be incorporated as conditions of approval for this project. ⑤ CONT.

Air pollution, noise and cumulative impacts

We support the reduced action alternative in the Cadi location as being the least environmentally damaging alternative as required by CEQA. Reducing daily tonnage limits would reduce impacts on air quality and reduce noise. We request that re-permitting be required in not later than 20 years so that new technologies may be incorporated into any further expansions. We also believe the Cadi site would greatly reduce the cumulative impacts because its acquisition from CLC would substitute the landfill for farming operations thus reducing the impact of both on the ground water basin. ⑥

This concludes our comments. Thank-you for your attention to our concerns.

Sincerely,

Lynne A. Plambeck
Chair

DOCUMENT S-25
LASER - LANDFILL ALTERNATIVES SAVE ENVIRONMENTAL RESOURCES
RESPONSE TO COMMENTS

Response S-25-1

1. Rail•Cycle, the County, and BLM acknowledge that provision of, and commitment to, alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. While certain types of projects are known to create a "demand" for development, their is no evidence that by providing capacity for the disposal of solid waste, that a landfill results in an increase in the volume of solid waste generated.

3. Through its passage of AB 939, the California Legislature has reaffirmed that each community must take responsibility for the waste it generates. As discussed in Chapter 2.0 of the Supplement, in implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally-safe transformation and land disposal, at the discretion of the city or county.

4. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally-safe transformation or land disposal, or both.

5. In addition to this source reduction and recycling elements. AB 939 requires cities and counties to demonstrate 15 years of solid waste disposal capacity. As discussed in Chapter 2.0 of the Supplement, the projected solid waste disposal capacity shortfall, after AB 939-mandated source reduction and recycling requirements have been met, is expected to be about 16,800 tons per day in metropolitan Los Angeles County alone by 2008. This shortfall in metropolitan Los Angeles is projected to increase to approximately 35,000 tons per day by 2014 (see Table 2.3 of the Supplement). This need, when considered with the 8 years of remaining capacity in San Bernardino County (see Table 2.1 of the Supplement), indicates that two regional landfills on the scale of the proposed action may be needed to enable southern California jurisdictions to fulfill their AB 939 landfill capacity requirements.

6. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation Districts for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally-safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

Response S-25-2

1. As indicated in Section 5.2.1.2.1 of the Supplement, ground water modeling conducted for the proposed project indicates that the ground water pumping of 130 acre-feet per year for onsite uses would not adversely affect other ground water users in the area (i.e., Cargill, National Chloride, or CLC). However, as described in Section 4.2.2 of the Supplement, the ground water recharge rate in the basin is uncertain, and proposed future ground water use for the CLC agricultural operation is substantial. Cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin. In the event the Bristol Basin is in overdraft, the use of 130 acre-feet of water per year by the proposed landfill would be considered an unavoidable adverse impact.

2. Even though the proposed Bolo Station Landfill has a relatively low water use rate (i.e., approximately 130 acre-feet per year), when this is combined with the proposed 30,000 acre-feet per year that would be used by CLC (URS, 1993) and the current water withdrawn by Cargill and National Chloride, this represents a cumulative significant adverse impact (see Section 6.2.3.2 of the Supplement). If the CLC expansion goes forward as planned, this significant

adverse impact would occur whether or not the proposed Bolo Station Landfill is operational.

3. The County General Plan does not indicate that landfills are incompatible with agricultural uses. The County General Plan contains policies designed to protect prime agricultural lands from encroachment by urban uses, but has no specific policies regarding nonprime agricultural lands such as the CLC site and landfills. While it is acknowledged that CLC considers its lands to be unique, the County General Plan does not designate these as prime agricultural lands. Nevertheless, the County General Plan's policies are designed to assure environmentally safe landfill development, which protects natural resources, and would indicate that, with implementation of required protective measures, landfills and agricultural lands are not incompatible uses. Furthermore, the environmental analysis conducted in this EIR/EIS does not identify significant impacts to surrounding land uses, or effects of the proposed landfill which would adversely affect CLC's agricultural operations.

4. CEQA and NEPA require that an EIR/EIS evaluate a proposed action's physical effects on the environment. The environmental effects of the proposed action as they relate to neighboring agricultural lands were analyzed in the Draft EIR/EIS in Sections 5.4, 5.7, and 5.14. The Draft EIR/EIS did not identify significant impacts to the neighboring agricultural operations. A buffer of two miles exists between the land holdings of CLC and the proposed action. When the current agricultural operations and the proposed expansion of CLC are considered, the distance from the proposed landfill is approximately two to three miles. It is not appropriate under the statutes, for an EIR/EIS to speculate as to the psychological ramifications that a proposed action may have on any one segment of the population, (i.e., produce consumers who may or may not be aware of the fact that the source of their purchase was located in the vicinity of a landfill).

5. The direction of ground water flow at the proposed site is south towards Bristol Dry Lake. CLC's land and crops are located east of the proposed site, and CLC's wells are located approximately five miles east of the site. Due to the direction of ground water flow, CLC land and crops could not be affected by materials deposited at the proposed landfill.

Response S-25-3

1. As discussed in Section 5.1.1.2.3 of the Supplement, differential settlement may occur when loads are placed on dissimilar soil types, at or near faults or fissures, or at discontinuities between soil types. No conditions have been observed at the proposed site that would cause differential settlement.

2. As described in the Draft EIR/EIS (Section 5.2.1.2.1), the filling approach for the landfill cells would result in nearly uniform loading on foundation soils, and therefore, would not result in significant differential settlement at interfaces between cells. The uniform placement of landfill loads during construction was one of the assumptions used in the settlement calculation.

3. As discussed in Section 5.1.1.2.3 of the Supplement, settlement in the form of "tilting" of the landfill bottom may result from different amounts of vertical settlement across a large horizontal distance. the slope of the tilting is expected to be in the range of less than 0.01 (vertical:horizontal). A slope of 0.01 is equivalent to 0.1 foot of settlement over a 10-foot distance. Due to the nature of the soils underneath landfill loads and the loading sequence, the occurrence of a significant amount of abrupt differential settlement is considered remote (Jacobs, 1993b). Rather than differential settlement, it is expected that settlement would be relatively uniform and that resulting changes in surface elevations would also be relatively uniform with no abrupt changes.

4. As settlement occurs and the bottom of the landfill tilts, the liner system would stretch to conform to the new bottom profile. The calculated maximum slope of the tilting at the proposed Bolo Station site is 0.01 (vertical:horizontal). This calculated maximum slope would cause FML components of the liner system to stretch by 0.005 percent or 5 feet per 100,000 feet of linear length of liner (Rail•Cycle, 1993c). Rail•Cycle proposes to use 60-mil HDPE as the FML components of the liner system. HDPE has a yield strain of 13 percent or 1,300 feet per 100,000 feet of linear length (Rail•Cycle, 1993c). Yield strain is the amount of stretch a material can resist without permanent deformation. Beyond the yield point, the material deforms permanently. Based on the above, the selection of 60-mil HDPE for the FML components of the liner system for the proposed Bolo Station Landfill provides a conservative factor of safety based on site-specific conditions.

Response S-25-4

1. As discussed in Section 1.6 of the Draft EIR/EIS, the selection of the Cadiz Valley Alternative site would incur impacts similar to those at Bolo Station. Regional impacts to air quality would be similar, but would be marginally increased as the rail distance to the Cadiz Valley Alternative site is approximately 10 to 15 miles further through Bolo Station. Impacts associated with the overall size of the proposed landfill would be reduced. A maximum of five sections of land (3,200 acres) would be included, compared to the seven and one-half sections of land (4,800 acres) at Bolo Station. However, access to the site by both rail and roadways is limited. Rail service to the Cadiz Valley Alternative site consists of a single line currently owned by the Arizona-California Railroad. This single line may require improvements to assure safe and efficient operation of rail transport of waste. The site is served only by a secondary dirt road, which would require major improvements to support landfill construction and operation vehicles. Improving access to the site would impact additional lands offsite. The Cadiz Valley Alternative site provides better habitat for the threatened desert tortoise. Tortoise were observed on the site during the survey conducted for this EIR/EIS.

2. Based on the above, and as discussed in Section 1.7 of the Draft EIR/EIS, while the Cadiz Valley Alternative site may be less visible than the proposed Bolo Station site, the proposed site is the environmentally superior alternative.

Response S-25-5

1. The requirements included in the USFWS Biological Opinion for protection of the desert tortoise at the proposed site are specifically included in this Final EIR/EIS (see Table S.2) and the Mitigation Monitoring and Compliance Program for the proposed project that will be adopted by the County Board of Supervisors.

Response S-25-6

1. As discussed in Section 1.6 of the Draft EIR/EIS, the impacts from the Reduced Action Alternative at Bolo Station, while reduced due to fewer acres being utilized (3,200 acres as compared to 4,800 acres), would be similar to those of the proposed action. Potential impacts directly associated with the amount of waste landfilled on a daily basis and over the life of the project would be reduced. Daily waste would be reduced to 12,000 tons per day from 21,000 tons per day. This alternative would also reduce the total landfill capacity and the height. Regional impacts to air quality from hauling waste by rail to the site would be reduced by approximately 40 percent as the number of trains traveling to the site on a daily basis would be limited to four. While the Reduced Action Alternative would decrease certain impacts as compared to the proposed action, it would not result in a reduction of all impacts below a level of significance.

2. Based on the above and as discussed in Section 1.7 of the Draft EIR/EIS, the proposed project is the environmentally superior alternative.

CITIZENS' ADVISORY COMMITTEE
FOR RAIL-CYCLE PROJECT

20 February 1994

County of San Bernardino
Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, California 92415-0182

Dear Mr. Scott:

We are commenting upon the proposed Rail-Cycle Bolo Station landfill Draft Supplemental EIR/EIS. We continue to have many concerns about the proposed landfill. The Citizens' Advisory Task recommends the "No Action Alternative" unless extremely strong mitigation measure are proposed beyond what are suggested in this Draft Supplemental EIS/EIR.

We are concerned that significant environmental impacts are unavoidable, and that no serious attempts have been made at any mitigation. A landfill permanently destroys the natural environment on which it is located and the cumulative impacts can affect the desert area forever. For these reasons and that no serious attempts have been made at significant mitigations, the "No Action Alternative" is the only possibility to protect the desert environment. These particular impacts are Visual Resources, Open Space Resources, Air Quality, and Ground Water.

Inadequacies of the Draft Supplemental EIR/EIS

Remedial action for leakage: All studies have shown that landfill sites eventually will leak - both leachate and gaseous emissions. This Supplement fails to deal with any remedial action for this possibility, simply states that "early detection would allow for the immediate implementation of appropriate verification analysis and, if necessary, corrective action." What corrective action is possible under 800 feet of trash? Additionally, the Supplement fails to deal with the very real possibility that the monitoring system will fail under the weight of the large amount of waste. There is even a failure to identify this possibility. ①

Overdraft of the Bristol Basin: The Supplement identifies this as a cumulative impact, but fails to analyze any alternative to this overdraft. Such alternatives must be considered as a part of an analysis. While it is not our position to suggest such alternatives, the Supplement should have identified such alternatives that are utilized by other water users in the desert. ②

Air Quality: The Supplement now correctly identifies that the Bolo project will contribute "significant unavoidable adverse NOx emissions." It also suggests two measures which will decrease the cumulative amounts of these admissions. It fails, again, to deal with further alternatives which have the possibility to contribute to long-term compliance ③

Visual Quality: A landfill in the desert will permanently alter the beautiful character of this site. It will be visible for 20 miles (from Sheephole pass on the south). Blowing trash can impact the surrounding area for miles, and the measures to deal with trash are inadequate. No clean-up for the surrounding area is suggested; the impact on the surroundings is not dealt with. ④

Open Space: This project continues to be incompatible with the Open Space Element of the San Bernardino County General Plan. It fails to deal with the project's impacts to the actual site as well as the cumulative impact of more employees, more transportation vehicles, more housing, and more people, more recreational vehicles impacting the surrounding area. It offers no alternatives or mitigation measures for this loss of open space. As such, it is delinquent as a document in dealing with this problem. ⑤

In conclusion, the Citizens' Advisory Committee supports the "No Action Alternative" for the Bolo Station landfill.

Sincerely,

Louise M. French
Louise M. French
Member, Citizens' Advisory Committee
Member, Sierra Club

DOCUMENT S-26
CITIZENS' ADVISORY COMMITTEE FOR THE RAIL•CYCLE PROJECT
RESPONSE TO COMMENTS

Response S-26-1

1. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the landfill liner system proposed by Rail•Cycle has been designed to protect underlying ground water from contamination. The proposed action includes a double-composite liner system, leachate collection system, horizontal and vertical gas collection system wells, and a UZM system for early detection, should the remote possibility of a gas or liquid release occur from the landfill. The proposed liner system exceeds the requirements of Subtitle D and CCR Title 23.

2. A detailed analysis of the evaluation of the Rail•Cycle-proposed liner system has been conducted by Rust Environment and Infrastructure (Rust, 1993a). Also included in the Rust report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned at 0.003 to 0.6 gallons acre/year, depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

3. As noted in this comment, landfill liners may leak. Based on an exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However, the authors clearly make a distinction between liners and liner systems, and further, state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that: "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions." The text makes it clear that it is inaccurate to conclude that liner systems cannot prevent water quality degradation.

4. The ground water monitoring system and the UZM system would assure early detection of any such release. In accordance with Subtitle D and CCR Title 23, should a release occur, Rail•Cycle would be required to implement an appropriate corrective action plan in consultation with the RWQCB to protect ground water quality within the Bristol Basin.

Response S-26-2

1. As indicated in Section 5.2.1.2.1 of the Supplement, ground water modeling conducted for the proposed project indicates that the ground water pumping of 130 acre-feet per year for onsite uses would not adversely affect other ground water users in the area (i.e., Cargill, National Chloride, or CLC). However, as described in Section 4.2.2 of the Supplement, the ground water recharge rate in the basin is uncertain, and proposed future ground water use for the CLC agricultural operation is substantial. Cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin. In the event the Bristol Basin is in overdraft, the use of 130 acre-feet of water per year by the proposed landfill would be considered an unavoidable adverse impact.

2. Even though the proposed Bolo Station Landfill has a relatively low water use rate (i.e., approximately 130 acre-feet per year), when this is combined with the proposed 30,000 acre-feet per year that would be used by CLC (URS, 1993) and the current water withdrawn by Cargill and National Chloride, this represents a cumulative significant adverse impact (see Section 6.2.3.2 of the Supplement). If the CLC expansion goes forward as planned, this significant adverse impact would occur whether or not the proposed Bolo Station Landfill is operational.

Response S-26-3

1. As discussed in Section 3.7 of the Draft EIR/EIS and Section 3.3 of the Supplement, none of the reasonable and feasible alternatives identified in the EIR/EIS would reduce the significant air quality impacts to the SEDAB that we associated with the proposed project.

2. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as

increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to southern California communities, after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, which was developed in response to a request by the Los Angeles County Sanitation Districts for long-term landfill capacity, would meet that need by helping satisfy the state's requirements, mandated by AB 939, for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise feasibly by reduced at the source, recycled or composted.

3. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this issue see Section 3.3 of the Supplement.

Response S-26-4

1. Litter control measures for the proposed Bolo Station Landfill were discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences (i.e., portable litter fence, primary litter fence, and the landfill perimeter fence) are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected.

2. An important point to note is that by primarily accepting waste that has been processed through a MRF, a significant portion of the primary source of litter at most landfills (i.e., paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the proposed landfill for disposal. This factor, in conjunction with the litter control measures that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

3. Notwithstanding the above, a mitigation measure has been included in this Final EIR/EIS (see Table S.2) that shall require the preparation and implementation of a litter control program that shall include reduction of the size of the working face or curtailment of waste disposal operations during periods of extremely high wind velocity. The wind velocity that would trigger these specific measures will be developed by Rail•Cycle in conjunction with the LEA and CIWMB as part of the SWFP.

Response S-26-5

1. Section 5.14.1.2 of the Draft EIR/EIS incorrectly indicated that the proposed project would require reclassification of the land use designation of the proposed site from Resource Conservation to a land use that would allow more intensive use of the site. If the County Board of Supervisors approves the proposed project, the County General Plan would be amended to revise the Infrastructure/Improvement Level Map and accompanying text to designate the site as the Bolo Station Landfill. The land use designation of Resource Conservation would be applied to the former public (i.e., BLM) land sections. The remaining sections of land at the proposed site are currently designated as Resource Conservation and would remain as such, if the proposed action is approved.

2. The proposed General Plan amendment is the mechanism for revising the Infrastructure/ Improvement Level Map and text to designate the site as a landfill. The General Plan Amendment would be considered by the County Board of Supervisors during its consideration of the proposed project.

3. As discussed in Section 3.7 of the Draft EIR/EIS, the site selection process for the proposed landfill included a criterion that the site should be compatible with existing and future land uses. The criterion included consideration of regionally significant existing and future open space resources such as the East Mojave National Scenic Area, WSAs designated in the CDCA, the WSAs proposed for inclusion in the pending California Desert Protection Act, and the proposed Mojave Desert National Park included in the pending California Desert Protection Act. As discussed in Section 5.14 of the Draft EIR/EIS, the proposed project would not impact regionally significant existing or future open space resources.

4. The selection of the proposed site reflects in part a recognition of the existing development in the project area including:

   - Mineral production (salts) on and surrounding the Bristol Dry Lake (i.e., Cargill and National Chloride).
   - Modest development at Amboy and Chamblis.
   - Transportation corridors (i.e., rail, road and pipelines).
   - Intensive agricultural operations at Cadiz (i.e., CLC).

   As noted in Section 5.14 of the Draft EIR/EIS, based on the avoidance of regionally significant existing and future open space resources, and the nature and extent of the existing development in the project area, while the proposed project is considered to have a significant impact on open space in the local vicinity of the site, the proposed project is not considered to have a significant impact on regional open space.

S-27

EAGLE MOUNTAIN
LANDFILL and RECYCLING CENTER

February 22, 1994

RECEIVED

Mr. Randy Scott
Senior Planner, Environmental Team
San Bernardino County
Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, CA. 92415-0182

Mr. Henri Bisson
Bureau of Land Management
California Desert District
6221 Box Springs Boulevard
Riverside, CA. 92507-0714

re: Supplemental to Draft Environmental Impact Report/
Environmental Impact Statement
Rail-Cycle - Bolo Station Landfill
State Clearinghouse No. 91092020

Dear Mr. Scott and Mr. Bisson:

The purpose of this letter is to provide your respective agencies with comments on the supplemental to the draft EIR/EIS which has been circulated for public comment. Mine Reclamation Corporation (MRC) received local approval and certification of the EIR for the Eagle Mountain Landfill and Recycling Center Project from Riverside County on November 3, 1992. Since that approval MRC has made significant progress towards obtaining all the necessary state and federal approvals for the other permits and entitlements needed to proceed with the construction of the project. This progress is evidenced by the following:

1. The Bureau of Land Management, California Desert District certified the Eagle Mountain EIS on October 20, 1993 when it issued its Record of Decision.

2. The South Coast Air Quality Management District has issued 11 of the required 13 permits necessary to begin construction. The other two permits should be issued within a few months.

MINE RECLAMATION
CORPORATION

☑ COACHELLA VALLEY
CORPORATE OFFICE
960 Tahquitz Canyon Way, Suite 204
Palm Springs, CA 92262
(619) 778-5131
FAX (619) 778-5144
(800) 253-0597

☐ EAGLE MOUNTAIN
P.O. Box 8
Desert Center, CA 92239
(619) 392-4308
FAX (619) 392-8101

S-27

3. On January 28, 1994 the Regional Water Quality Control Board - Colorado River Basin (RWQCB) in a letter to MRC, deemed our Report of Waste Discharge complete; and in a letter dated February 8, 1994, MRC was advised that the RWQCB would hear comments and act on the proposed permit on May 17, 1994. The 401 Water Quality Certification will also be considered at this May 17 meeting.

4. The Final RDSI will be submitted to the Riverside County LEA in approximately three weeks.

We anticipate that all permits will be obtained by early fall of 1994. Additionally, decisions on the appeal of Riverside County's certification of the EIR and BLM's approval of the land exchange are anticipated before the end of July 1994.

Page 3-13: The supplemental EIR/EIS contains a discussion of the criteria and methodology for evaluating the proposed project as well as alternatives to the proposed project. There is a list of project-specific siting and operational requirements identified and discussed on pages 3-13 and 3-14 of the supplemental EIR. None of these criteria indicate that ownership of land (or potential for acquisition) by Rail-Cycle is one of the criteria. Yet in the Table 3.2, the Eagle Mountain site, as well as 3 others, are eliminated as alternatives to the Amboy Project due to "infeasability of acquisition" or "due to competing project." There appears to be a discrepancy between the listed siting and operational requirements and the actual evaluation of each site. ①

In the November 1992 draft EIR/EIS (page 3-73) it was found that, "Amboy in San Bernardino County meets the Rail-Cycle siting and operational criteria and, depending on the specific site of the landfill, the Amboy/Cadiz Valley area appears to meet federal, state, and local regulatory criteria for siting and operation of a Class III landfill." Based on our review of the siting and operational criteria on pages 3-13 and 3-14 of the supplemental to the draft EIR/EIS, and based on earlier reasoning in the draft EIR, it appears now that at least 4 other sites, including Eagle Mountain, meet the site selection criteria and methodology and should be evaluated as alternatives based on environmental factors and impacts. From our standpoint if alternative sites are going to be evaluated then the potential environmental impacts and associated mitigation measures proposed for such impacts should be compared so that decision makers can make informed decisions. An example of an evaluation and comparison based on environmental impacts is the discussion of Rail-Cycle's unavoidable adverse impacts, set forth below. ②

Mr. Scott
Mr. Bisson
February 22, 1994
Page 3 of 4

Page 1-7: The EIR/EIS lists five unavoidable adverse impacts of the proposed Bolo Station project which could not be completely mitigated: overdraft of groundwater; impairment of visual quality due to alteration of the natural topography; impact to the open space value of the site; change in the socioeconomic character of the site; and air quality impacts exceeding state standards for these constituents. The Eagle Mountain Final EIR/EIS (Vol I of III, pg. xi) identified two unavoidable, significant environmental impacts of the Eagle Mountain Landfill project. These were impacts to air quality and overdraft of groundwater. ② CONT.

Based on this information it appears that the Eagle Mountain Landfill project has fewer unmitigated environmental impacts than the Bolo Station Landfill.

In addition, MRC believes that all rail haul projects should be developed on a "level playing field", including mitigation measures adopted for each project. In our March 1, 1993 comment letter on the draft EIS/EIR we outlined a number of air mitigation measures which will be undertaken by MRC to reduce air emissions to the extent feasible and practical. It appears that many of these same measures have not been incorporated into the Bolo Station project mitigation including: ③

1. limited idling time and regular preventive maintenance of construction equipment;
2. use of certified on-highway versions of engines on construction equipment, when feasible;
3. electric versions of stationary equipment, where feasible;
4. prewatering of soil prior to excavation to minimize fugitive dust;
5. use of spray nozzles or baghouses for concrete and/or asphalt plants;
6. installation of two permanent PM_{10} ambient monitors and one gaseous pollutant monitoring station;
7. electric or alternative fuel versions of overhead cranes;
8. review feasibility of electrification of on-site equipment every ten years;
9. mechanically sweep all on-site roads; and

Mr. Scott
Mr. Bisson
February 22, 1994
Page 4 of 4

10. use of wheel washing stations.

Implementation of these mitigation measures would appear appropriate for the Rail-Cycle project as a means to address Air Quality Impacts. ③ CONT.

Page 5.4-5: The supplemental EIR/EIS contains a discussion of the recalculation (different from the draft EIR/EIS) of locomotive emissions based "on current CARB plans to achieve emission reductions from locomotives in nonattainment air basins." The recalculated air emissions are based on projected reductions of NO_x (40%), PM_{10} (10%), and SO_x (84%) by 1998. It is our understanding that these emission reductions are proposed by CARB but they have not been implemented or achieved. Is Rail-Cycle committing to achieving these reductions with their trains? If they are not so committing, or if these reductions cannot be feasibly achieved, then use of these reductions in projecting air emissions in the EIR/EIS is not appropriate. ④

It appears that the landfill is still designed with a minimum base slope of 1% but no demonstration of long-term performance of the leachate collection system or effect of settlement is provided. Given that up to 14 ft. of vertical settlement will occur and it is likely to vary across the site it appears this design may present operational problems in the near future. Additionally, US EPA has published the Solid Waste Disposal Facility Criteria - Technical Manual, Nov. 1993, which states, on page 166, "[t]he typical bottom liner slope is a minimum of two percent after allowances for settlement in all points in the system." Please explain how the liner system design meets this recommendation. ⑤

We hope the foregoing comments will be considered in your review of the EIS/EIR. Thank you for the opportunity to comment.

Sincerely,

Gary W Johnson

Gary W. Johnson
Vice President, Landfill Development

DOCUMENT S-27
EAGLE MOUNTAIN LANDFILL AND RECYCLING CENTER RESPONSE TO COMMENTS

Response S-27-1

1. Included in the analysis of alternatives for the Bolo Station project were specific siting, design, and operations requirements develop by Rail•Cycle. Section 3.7 of the Draft EIR/EIS stated that part of the operational siting criteria included:

    > "A portion of the land within the proposed landfill site boundaries owned by ATSF and adequate additional land available for acquisition."

    As stated in Section 1.3.1 of the Supplement, the revised or clarified information was to be used in conjunction with the information included in the Draft EIR/EIS. Therefore, there is no discrepancy between the listed siting and operational requirements, and evaluation of each alternative site in the Supplement, as stated in the comment.

Response S-27-2

1. The Eagle Mountain site was eliminated from detailed consideration in the EIR/EIS because it is being actively proposed for a rail-haul landfill by another applicant and could not reasonably be considered to be available to Rail•Cycle. Therefore, rather than an alternative to the proposed project, as discussed in Chapter 6.0 of the Draft EIR/EIS and Chapter 6.0 of the Supplement, the proposed Eagle Mountain landfill was considered as a cumulative project.

2. Regarding identification of significant unavoidable impacts associated with the proposed Rail•Cycle project, the County elected to employ a conservative approach to the environmental analysis. It is important to note that the Eagle Mountain EIS/EIR may have utilized different methodologies and applied different thresholds of significance in determining which environmental effects should be considered significant and unavoidable. It is the position of the County that the impacts found to be significant and unavoidable for the proposed Rail•Cycle project (i.e., visual, land use, socioeconomics, air quality, and ground water) would occur for any waste-by-rail landfill in the greater southern California area. Based on the criteria employed by the County, the Eagle Mountain project would be expected to incur similar significant environmental impacts as the proposed action.

Response S-27-3

1. Through the Draft EIR/EIS and the Supplement, the proposed specific impacts of Rail•Cycle to air quality have been addressed (see Section 5.7 of the Draft EIR/EIS and Section 5.4 of the Supplement). A full range of air quality mitigation measures are included in this EIR/EIS (see Table S.2) that are substantially similar to those listed in the comment. For example, the following mitigation measures are included for the proposed Rail•Cycle project:

    - Permanent onsite roadways shall be paved to minimize fugitive dust emissions.
    - Roads which shall be used for an extended period of time (e.g., five to ten years) to haul containers from the railyard/offloading facility to the active working face shall also be paved.
    - A miscellaneous crushed based shall cover unpaved roadways to minimize fugitive dust emissions.
    - Unpaved roadways shall be sprayed regularly with water and/or chemical dust suppressants to minimize fugitive dust emissions.
    - Chemical binding agents shall be applied to cover stockpiles to minimize wind erosion emissions.
    - Low-sulfur diesel fuel of 0.05 percent shall be used to minimize SO_2 (PM_{10}) precursor emissions.
    - Rail•Cycle shall use engines in heavy duty diesel trucks meeting advanced emission standards for highway vehicles.
    - Landfill operating equipment shall be replaced when new equipment meeting higher standards becomes available.
    - High combustion efficiency/low-NO_x flare shall be used to minimize O_3 precursor emissions. The flare shall be replaced as the project matures, by a gas turbine and then a steam boiler, both capable of producing electricity.
    - Rail•Cycle shall contribute to funding of public transportation or ride sharing systems for local communities in the SEDAB.
    - Rail•Cycle shall contribute to funding of a program to retire older, high pollution vehicle in the SEDAB.

Response S-27-4

1. As indicated by the comment, it is acknowledged that the emission standards for remanufactured locomotives proposed by the CARB to take effect in 1998, have not yet been adopted. However, the Draft Federal Implementation Plan issued by the EPA in February 1994 for three air basins in California (i.e., SCAB, and the Ventura and Sacramento air basins) includes proposed California-wide and nationwide emission standards for new locomotives, as well as, remanufactured locomotives beginning in 2000.

2. It is clear through the issues being addressed by the SCAB's Air Quality Management Plan, CARB's State Implementation Plan, and EPA's Federal Implementation Plan for California, that reductions in emissions from locomotives will occur. CARB's locomotive emission standards discussed in Section 5.4.2 of the Supplement are considered to be conservative. Under the Federal Clean Air Act Amendments of 1990, the states were prohibited from establishing emission standards for new locomotives. As only EPA could establish emission standards for new locomotives, CARB proposed standards for remanufactured locomotives. Therefore, the combination of CARB's standards for remanufactured locomotives and EPA's standards for remanufactured and new locomotives, will result in reduction of locomotive emissions throughout California.

3. Based on the requirements of the Federal Clean Air Act Amendments of 1990 and the court order requiring EPA to adopt a Federal Implementation Plan for California, it is clear that locomotive standards will be adopted. For purposes of this EIR/EIS, it is appropriate to assume that CARB and EPA will adopt locomotive emission standards as required by federal law and the courts.

4. The trains that would transport waste to the proposed Bolo Station Landfill will be operated by ATSF. ATSF and other railroads in California will be required to implement the locomotive emission standards adopted by CARB and EPA. If the combined locomotive standards adopted are less stringent than the proposed CARB standards for remanufactured locomotives noted in the Supplement, additional offsets could be required by the MDAQMD under its New Source Review Rule. The offset requirements, if any, for the proposed project will be based on an actual emission inventory rather than the conservation inventory developed to support the analysis in the EIR/EIS. The determination of offset requirements, if any, is a permitting issue and not an EIR/EIS issue.

Response S-27-5

1. As noted in Chapter 2.0 of this Final EIR/EIS (Document 034, Response 034-60) the final determination of the appropriate base slope of the landfill is a detailed design issue to be established during the proposed action's final design. The percent of base slope must be approved by the SBCDEHS, acting as the LEA, the CIWMB and the RWQCB as part of the permitting process for the proposed landfill. The final base slope would be established based on site-specific considerations relative to potential landfill liquids generation, settlement, and other factors. The final slope would be adequate to provide proper drainages to leachate collection sumps to be established along the north and south perimeters of the landfill.

S-28

Fire and Road Commission
CSA 70-M - Wonder Valley
80526 Amboy Road
29 Palms, CA 92277

County of San Bernardino
Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182

Attn: Randy Scott

Dear Mr. Scott:

Attached find comments which represent the collective view of the CSA 70-M Fire, Road and Park Advisory Commission. These comments are in response to the Supplement to Draft Environmental Impact Report/Environmental Impact Statement for the Rail Cycle-Bolo Station Landfill. Had we received copies of this document in a timely fashion we would be attaching a more thorough response

As residents of an area directly affected by this proposed project we would hope that your office could, in the future, provide us with such documentation.

Sincerely,

Jim Copeland
Chairperson, CSA 70-M
Advisory Commission

cc Marsha Turoci, Supervisor First District
CSA 70-M Commissioners

MAR 1994
RECEIVED
BY

S-28

COMMENTS ON RAILCYCLE - BOLO STATION LANDFILL EIR/EIS

Dear fellow commissioners & community members,

I regret that I will not be able to attend the February 19 meeting of the CSA 70-M Fire & Road Commission due to pressing professional obligations critical to my livelihood. Knowing that the Commission is scheduled to consider a resolution on the Railcycle - Bolo Station Landfill at this meeting, I would like to submit these comments on the project for your consideration.-Mark

DIRECT IMPACTS TO CSA70-M:

Chapter 5.0 - Potential Environmental Impacts

5.7-7 Significant Unavoidable Adverse Impacts (to air quality)
Assumes unavoidable impacts to PM-10 and ozone precursor pollutants.

PM-10'S: As noted in Section 5.7.1.2.1 of the Railcycle-Bolo (R-B) EIR/EIS, existing levels of PM-10 at the site currently exceed the state 24 hour annual standards.

Ozone (O3) precursors: Expected construction and operation emissions of NOx and ROG (O3 precursors) are expected to exceed the significance threshold levels.

Discussion: PM-10 levels regionally exceed state 24 hour standards. Ozone levels regionally exceed both state and federal standards on a seasonal basis. The R-B EIR/EIS clearly states in section 5.7-23 that these impacts "cannot be mitigated to below a level of significance, these impacts are considered to be significant and unavoidably adverse."
What this means to residents of the CSA 70-M area is a potential deterioration in the local air quality as a direct consequence of the proposed project.

Many residents of the CSA 70-M area have come here historically for the pristine air quality for both health and esthetic reasons. An "unavoidably adverse" impact to the local air quality would be unacceptable to these residents. ①

5.15-7 Police and Firefighting services:
Assumes no significant impact to local fire protection services.

Firefighting: Providing emergency protection to the proposed site could be a very significant impact for the Wonder Valley Fire Agency (County stations 119 & 120). At best, W.V. Fire is just able to provide protection to the CSA 70-M area at it's current level of funding. W.V. fire is neither staffed nor funded to meet the potential emergency needs of a new project as large as Railcycle-Bolo. Further, the R-B site could pose emergency response situations unique to a large scale rail and waste handling operation for which the W.V. Fire staff has received no specific training to date. ②

Police: As the R-B EIR/EIS points out, the Morongo Basin Sheriff's dept. is currently "at capacity", and "the requirement to provide services for additional population within the service area could be a significant impact." This is particularly true for the CSA 70-M area, which is already experiencing hardships from inadequate law enforcement presence. If the R-B project were to be approved, such approval must be based on mitigating the added load to law enforcement such a project would impose. ③

5.15-17 Fire Protection:
Assumes proposed new fire/paramedic station in project vicinity would mitigate firefighting related impacts.

The construction of a fire/paramedic station in the R-B site vicinity would not necessarily address the increased traffic load through the CSA 70-M area and the potential increase in traffic related emergencies. The R-B EIR/EIS states clearly that nearly 50% of the personnel affiliated with the site would reside in the Morongo Basin. Further, the site would almost certainly develop additional traffic in the form of service and support personnel who would need to travel to and from site. Amboy road is the only route from the Morongo Basin to the R-B site, and would be a route of choice for service and support personnel traveling to the site from beyond the Morongo Basin. ④

The concern is twofold: First, that Amboy road goes right through CSA 70-M and is the main artery for local community traffic. Second, that Amboy road is already in deteriorated condition from increased traffic through the area. ④ CONT.

Besides the direct traffic and traffic accident potential within the CSA 70-M area, the existence of a fire/paramedic station at or near site would not necessarily preclude the need for W.V. Fire response to a large scale emergency at or near the proposed site. ⑤

In conclusion, there are several issues covered in the R-B EIR/EIS that clearly indicate impact or potential impact to the CSA 70-M area. Indirect impacts to the area include:

Potential loss of future regional water resources due to contamination in the event of landfill liner failure. Such a failure could occur as a result of improper installation, major seismic event, settling, or poor site design. It is worth noting that landfill site liners at certain other sites have failed in the past. Although not prima facie evidence that the R-B design wouldn't work, it needs to be considered how long the liner must remain intact: The materials buried at this site will pose a threat potential to the water supply for hundreds if not thousands of years to come. ⑥

Potential for highway haulage of Morongo Basin solid wastes though the CSA 70-M area. Current county plans for local waste management call for the delivery of solid wastes to a centralized landfill in the Landers area. This is a historically existing site, operated by the County Solid Waste Mgt. Dept. My concern is that a future change of plans could result in part or all of the Morongo Basin's solid waste stream being trucked through the CSA 70-M area. Impacts to the local community would include noise, traffic, road deterioration, fire response, and law enforcement response. ⑦

Establishment of a precedence: Landfills in the Eastern Mojave Desert have been operated almost exclusively to meet local needs. To permit large, regional landfills to be established here for use by distant communities is a green light to future development of the same nature. It perpetuates a misconception that the Mojave Desert region is a "waste" land, of no regional or environmental significance except as a place to get rid of something unwanted. ⑧

S-28

To allow the permitting of such sites would herald the beginning of a long decline in the quality of life in the region.
CSA 70-M would be affected to the extent that it is a desert community located in the Mojave Desert region. ⑧ CONT.

I am recommending to my fellow commissioners that we go on record as being opposed to the Railcycle-Bolo project as it is currently proposed.

Mark E. Heuston
February 18, 1994

DOCUMENT S-28
CSA-70 FIRE AND ROAD COMMISSION
RESPONSE TO COMMENTS

Response S-28-1

1. The commenter's concern regarding air quality impacts is noted; however, this comment does not provide specific comments regarding the information provided in the Supplement. No specific response is required.

Response S-28-2

1. The Rail•Cycle project and surrounding community are served by the County Forestry and Fire Warden Department. The County Forestry and Fire Warden Department would provide emergency services for the proposed action and surrounding community through a new County fire station to be constructed by Rail•Cycle at the entrance of the proposed landfill. Appropriate firefighting equipment and County firefighting personnel would be provided at this new fire station. County fire personnel will be trained as Emergency Medical Technicians and as HAZMAT fire responders.

2. The County Forestry and Fire Warden Department has reviewed the requirements of the proposed action, including the transport of waste-by-rail through the High Desert portion of the County, and has determined that the proposed action would not have a significant impact on the Department's ability to provide emergency services (Miller, 1993). Rail•Cycle, as with all citizens and private enterprises, would be responsible for civil cost recovery under the California Health and Safety Code 13009.

3. The Wonder Valley Fire Department has no legal requirement to provide services outside its district, except for its mutual aid agreements.

4. It is expected that the establishment of a new County fire station at the entrance to the proposed landfill would decrease the requirements for the Wonder Valley Fire Department to service the Amboy area. To the extent that emergencies could be handled by personnel and equipment at the new station, the Wonder Valley Fire Department would not be involved.

Response S-28-3

1. If the County Sheriff's Department determines that additional personnel or equipment is required due to the proposed project or the increase in population attributed to the proposed project, a portion of the per-ton mitigation fee that could be established during negotiation between the County and Rail•Cycle could be the source of funding for the expansion of the Sheriff's Department.

Response S-28-4

1. See Response S-28-2 for information regarding County provided emergency services.

2. Regarding the condition of Amboy Road, roadways in the project area would be affected by employee and nonemployee traffic, based on the number of new employees that move into the area in response to the proposed action. As discussed in Section 5.15 of the Draft EIR/EIS, it is estimated that the number of employees that may commute to the site from the Morongo Basin would be about 130 for project construction and 100 for operations. At an estimated 1.2 employees per vehicle, this would result in additional employee traffic of approximately 110 vehicles for project construction and 85 vehicles for operations.

3. It is expected that Amboy Road would be most affected, with project-related personnel and other vehicles being added to the existing levels of about 630 vehicles per day. Amboy Road has a capacity of about 12,000 vehicles per day. With an average daily traffic volume of 630 vehicles, Amboy Road is currently operating at a LOS of A. The increase in traffic volume to 740 vehicles per day due to the proposed action would not result in a reduction of the LOS on Amboy Road and so would not have a significant effect. No requirements to upgrade the roadway is expected due to the proposed action. Maintenance of Amboy Road is a County responsibility and, assuming that most of the traffic between the Morongo Basin and the site consists of personal vehicles, there would not be additional maintenance requirements.

Response S-28-5

1. See Response S-28-2.

Response S-28-6

1. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the landfill liner system proposed by Rail•Cycle has been designed to protect underlying ground water from contamination. The proposed action includes a double-composite liner system, leachate

collection system, horizontal and vertical gas collection system wells, and a UZM system for early detection, should the remote possibility of a gas or liquid release occur from the landfill. The proposed liner system exceeds the requirements of Subtitle D and CCR Title 23.

2. A detailed analysis of the evaluation of the Rail•Cycle-proposed liner system has been conducted by Rust Environment and Infrastructure (Rust, 1993a). Also included in the Rust report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned at 0.003 to 0.6 gallons acre/year, depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

3. As noted in this comment, landfill liners may leak. Based on an exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However, the authors clearly make a distinction between liners and liner systems, and further, state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that: "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions." The text makes it clear that it is inaccurate to conclude that liner systems cannot prevent water quality degradation.

4. The ground water monitoring system and the UZM system would assure early detection of any such release. In accordance with Subtitle D and CCR Title 23, should a release occur, Rail•Cycle would be required to implement an appropriate corrective action plan in consultation with the RWQCB to protect ground water quality within the Bristol Basin.

Response S-28-7

1. The decision as to whether to transport solid waste from the communities in the Morongo Basin to the Bolo Station Landfill lies solely with the communities. Concerns regarding the potential impacts (i.e., noise, traffic and public services) that could be associated with the transport of waste from the Morongo Basin to the Bolo Station Landfill could be raised as part of the decision-making process that the communities in the basin would need to go through as part of a change in their solid waste system.

Response S-28-8

1. The issue raised by this comment is a policy matter rather than an EIR/EIS issue. The County Planning Commission and the Board of Supervisors will address this policy issue as part of their consideration of the EIR/EIS.

THE ENVIRONMENTAL SOLUTIONS PROJECT
◆
advocacy, consultation, policy development and research
2760 Golden Gate, San Francisco, California 94118
(415) 752-8678

MAR 1994
RECEIVED
BY

Date: February 16, 1994

To: Randy Scott
County of San Bernardino, Planning Department
385 North Arrowhead, 3rd Floor
San Bernardino, California 91425-0182

From: Philip M. Klasky

Re: Comments on the Draft Supplemental Environmental Impact Report/Statement (SEIR/S) for the Rail•Cycle - Bolo Station Landfill

The following are comments to the Draft Supplemental Environmental Impact Report/Statement for the proposed Bolo Station landfill. We appreciate the opportunity to contribute to the administrative record and hope that our comments can assist county, state and federal agencies in their analysis of the proposed project.

In general, the proposal represents another assault on the California desert ecosystem and should be considered within the context of other proposed habitat degrading projects such as the Eagle Mountain landfill, Broadwell Dry Lake toxic repository and the Ward Valley LLRW facility. ①

The proposal for a landfill which would receive over 21,000 tons of garbage daily from the Los Angeles metropolitan area is environmentally irresponsible and will have a dramatic negative impact on the ecological integrity of the region by the dispersal of the trash and landfill leachate through wind and water systems. The landfill would attract scavengers such as coyote and raven which would prey upon area wildlife. The landfill would have an adverse effect upon designated critical habitat for the desert tortoise. ②

Alternatives, such as source reduction and energetic recycling/reuse programs, are not adequately considered in the draft SEIR/S. The document does not address environmental issues such as the potential effects of the project on the areas along the railway and the effects of increased predation on the ecological constituencies of adjacent critical habitat for the threatened desert tortoise.

THREATS TO THE DESERT TORTOISE

Of particular concern is the proliferation and concentration of raven and coyote populations at the landfill and the resultant effect on desert tortoises.[1] Ravens are a major predator of the desert tortoise which has lost half of its numbers in the last 7 years. Ravens attracted to the landfill would include tortoises in its diet year round or feed on trash in winter and summer months and then prey upon juvenile tortoises in spring and fall. The range of the raven is greater than 40 miles.[2] ③

On February 8, under court order from a lawsuit brought by environmental groups and Native American tribes, the U.S. Fish and Wildlife Service ("Service") designated 6.4 million acres of critical habitat for the threatened desert tortoise.

The Chemehuevi Critical Habitat Unit ("CHU") is located within the raven's foraging range of the Bolo site. The landfill would adversely modify critical habitat by attracting and proliferating raven populations. The direct and indirect destruction or adverse modification of critical habitat is clearly prohibited by the Endangered Species Act ("ESA")[3].

Other areas recommended for protection by the draft Desert Tortoise Recovery Plan and the Bureau of Land Management are also located within the raven's foraging range of the Bolo site.[4] These areas include: Category 1 habitat in Fenner Valley, located 23 miles from Bolo Station; Joshua Tree National Monument, located 35 miles from Bolo Station; and Ivanpah, located 36 miles from Bolo Station. ④

Due to the threat from landfill induced raven predation for the 60 to 100 year life of the project, the Bolo Station landfill is in violation of the goals of the draft Desert Tortoise Recovery Plan which calls for the prohibition of activities which "diminishes the land to support desert tortoises, other wildlife and native vegetation."

Proposed mitigations, such as relocation of tortoises and poisoning, are risky and represent a danger to tortoises, sensitive and candidate species.

---

[1] Draft Desert Tortoise Recovery Plan, 1993. Appendix-D, Human-Induced Threats to Desert Tortoises.
[2] Draft Environmental Impact Report/Statement for the Bolo Station Landfill (DEIR/S), 5.6-1
[3] Section 7, Endangered Species Act
[4] Bureau of Land Management, 1988. Desert Tortoise Management on Public Lands: A Rangewide Plan.

REINITIATION OF FORMAL CONSULTATION

On August 4, 1994, the U.S. Fish and Wildlife Service issued a "no jeopardy" Biological Opinion ("Opinion") on the effects of proposed Bolo Station landfill on the desert tortoise. The criteria for the Biological Opinion is very narrow since it considers the effects of a project on the continued existence of an endangered species. The Service did not consider the effects on critical habitat since the final designation had yet to be made.

The Endangered Species Act is clear on the fact that the designation of critical habitat triggers reinitiation of formal consultation. Reinitiation must occur "if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;" and "if a new species is listed or critical habitat designated that may be affected by the identified action."[5]

If a proposed federal action, such as a land transfer, sale or right-of-way permit, involves a listed species or critical habitat, the Service is required to prepare a biological assessment.[6] Failure to prepare a biological assessment is a significant procedural violation of the ESA.[7] ⑤

Now that critical habitat has been designated, the Service is required to re-initiate consultation with the BLM to determine the "direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action."[8] The consultation should address the impacts of raven predation upon all essential desert tortoise habitat with in a 40 mile range of the Bolo Station project.

The standard for the protection of critical habitat is greater than the scope of the 1993 Opinion. The Service must consider actions which would destroy or adversely modify critical habitat and would violate goals to promote the conservation and recovery of the desert tortoise.

ISSUES TO CONSIDER DURING FORMAL CONSULTATION

1. The Service should conduct an independent survey of tortoise densities at the Bolo Station site. The Service has depended on data gathered by an individual who has a conflict of interest. Alice Karl has been in the employ of US Ecology, designated contractor for the Ward Valley LLRW facility, which has advocated against increased protection of the threatened desert tortoise. ⑥

2. The 1993 Opinion recommends that a "field contact representative" in the employ of Rail Cycle would be responsible for overseeing compliance with protective stipulations for the desert tortoise and would be expected to "halt construction or operational activities that are in violation of the stipulations." A manager or employee of Rail Cycle would have a conflict of interest and would be under great pressure to support the on-going construction and operation of the landfill irrespective of the stipulations.

3. Relocation is risky and has resulted in tortoise deaths and adverse impacts upon recipient populations.

4. The Opinion should specify how stipulations such as the removal and handling of tortoises, landfill cover, prohibition against cross-country vehicle use and speed limits would be enforced.

5. The study of a potential problem during the operation of project is not an adequate mitigation. The effects of raven predation should be understood before permission for the project can be granted. ⑥ CONT.

6. It is truly ludicrous to recommend that all trash and food items be properly contained to control raven populations when project proposes to create a 420 foot high pile of garbage.

7. The 4,800 acre mountain of trash at Bolo Station would constitute a huge perch for ravens.

8. The landfill would operate on a 24 hour basis and therefore it would be impossible to assume that an effective cover would be in place at any given time.

9. The Opinion should address the migration of trash from the site and along rail lines and the resultant attraction of tortoise predators.

10. The Service should estimate the take of desert tortoises associated with increased raven and other scavenger populations for the life of the project.

11. Poisoning intended for ravens could kill or injure other wildlife including sensitive and candidate species.

—— • ——

The Bolo Station landfill represents another attempt to use the desert bioregion as a dumping ground for ever-expanding urban populations. Instead of concentrating efforts at source reduction, recycling, reuseables, minimal packaging and economic incentives for conservation, this project would encourage the continued consumption of disposable commodities.

---

[5] 50 CFR s 402.16
[6] 16 USC s 1536 (c) (1); 50 CFR s 402.12 (d) (2).
[7] Thomas v. Peterson, 753 F. 2d at 763-64.
[8] 50 CFR s 402.02

The Service should conduct a comprehensive analysis of the potential effects of raven predation upon tortoise populations in Category 1 and 2 habitats, National Park lands and critical habitat. The study should include predictions for cumulative effects for the 66 to 100 year life of the project.

Poisoning and relocation are problematic measures which would threaten ⑦
wildlife. Landfills degrade the ecosystem and accumulate toxic leachate.

The County of San Bernardino and the federal government should create a long-term vision of the future for California's precious desert ecosystems encouraging conservation and restoration within a climate of sustainable development.

Thank you for your consideration of our comments.

cc Senator Barbara Boxer
Senator Dianne Feinstein
Sierra Club Legal Defense Fund

DOCUMENT S-29
THE ENVIRONMENTAL SOLUTIONS PROJECT
RESPONSE TO COMMENTS

Response S-29-1

1. Chapter 6.0 of the Draft EIR/EIS and Chapter 6.0 of the Supplement address the cumulative impacts of the proposed Bolo Station Landfill and other projects in the region, including those projects noted by this comment.

Response S-29-2

1. The issues raised by the comment were addressed in the Draft EIR/EIS and Supplement.

Response S-29-3

1. Section 5.6 of the Draft EIR/EIS outlined mitigation measures designed to minimize potential effects to the desert tortoise by ravens and other vectors (i.e., coyotes) that may be attracted to the landfill. Implementation of these measures, along with additional or revised mitigation measures included in this Final EIR/EIS, which included a regional raven baseline study and ongoing monitoring program, would assure that ravens and other vectors do not have a significant effect on the tortoises.

2. Following distribution of the Draft EIR/EIS, the USFWS issued its Biological Opinion for the proposed action regarding the desert tortoise. As stated in Section 1.1 of the Supplement, the USFWS determined that the proposed action would not jeopardize the desert tortoise. A copy of the Biological Opinion was included in Appendix D of the Supplement.

Response S-29-4

1. As noted in this comment, subsequent to the Biological Opinion for the desert tortoise issued by the USFWS, actual habitat for the tortoise has been established. The designated habitat is approximately six to seven miles east of the Bolo Station site and the findings and required mitigation as outlined in the opinion, are still valid.

Response S-29-5

1. This comment states the opinion of the commenter regarding the need for the BLM to reinitiate consultation with the USFWS regarding the desert tortoise in accordance with Section 7 of the Endangered Species Act. As the USFWS's Biological Opinion for the Bolo Station Landfill project took into account those areas of tortoise habitat that have now been designed as critical habitat, the Biological Opinion remains valid and additional consultation is not required.

Response S-29-6

1. This comment provides the commenter's opinion on issues that the USFWS should reconsider regarding its Biological Opinion for the Bolo Station Landfill project. As noted in Response S-29-5, additional consultation is not required.

Response S-29-7

1. This comment states the opinion of the commenter but does not provide a specific comment regarding the Supplement. No specific response is required.

S-30

CITIZENS
FOR
A
BETTER
ENVIRONMENT

122 Lincoln Blvd.
Suite 201
Venice
CA 90291
310.450.5192
Fax: 310.399.0769

501 Second St.
Suite 305
San Francisco
CA 94107
415.243.8373
Fax: 415.243.8980

88 First St.
Second Floor
San Francisco
CA 94105

Board of Directors:

Nicholas Arguimbau, Chair
Richard Blades
Marianne Brown
Kenneth Finney
Bryan Ford
Gilda Haas
Kathryn Knight
Richard Loya
Joanne Marlowe
Gary Patton
Stephanie Pincetl
Jill Ratner
Nell Soto

County of San Bernadino
Planning Department
385 North Arrowhead, 3rd Floor
San Bernadino, CA 91425-0182
Attn: Mr. Randy Scott

January 14, 1994

RE: The Rail - Cycle BOLO Station Landfill Proposal

Dear Sir:

I am writing to you to voice this organization's concern over the proposed landfill project described in your Notice dated December 1, 1993 as the Rail - Cycle BOLO Station Landfill Proposal.

It is with grave amazement that I review the potential impacts of this proposed citing of this landfill at this particular location. The very nature of the topography invites the contamination of the water shed, further it seriously jepordizes the food supply of not only the surrounding community but has the far reaching implication of contaminating a large pristine supply of brine that would poison unsuspecting consumers through out the country.

This organization intends to lend it's support to our Brothers and Sisters of the Desert in their attempt to de-rail this project. We stand in unity with all those who resist this, yet another blatant example of envioronmental racism targeting communities of color and the poor. ①

I most emphaticlly request that your department reject this proposal and submit your recommendation to all participant agencies that this project be rejected on the basis of the environmental impacts to the surrounding communities and the farther reaching contamination to the food supplies of the unsuspecting consumer.

With the gravest of concern I request that this organization, Citizens for a Better Environment, be placed in the loop for all relevant Public Notices, Reports and Schedules of the pertinent Workshops, Governmental and or Quasi- Governmental forums that would take this project as an order of their Business. Further I request all Public information available through your office.

S-30

January 13, 1994
page 2 of 2

All response to this written comment should be addressed to:

Citizens for a Better Environment
122 Lincoln Blvd. # 201
Venice, CA. 90291
Attn: Carlos J. Porras

Sincerely,

Carlos J. Porras, Southern California Director
Citizens for a Better Environment

DOCUMENT S-30
CITIZENS FOR A BETTER ENVIRONMENT
RESPONSE TO COMMENTS

Response S-30-1

1. This commenter expresses opposition to the proposed project and concern that the Bolo Station Landfill would contaminate the water shed in the area, polluting local agriculture and brine resources. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the landfill liner system proposed by Rail•Cycle has been designed to protect underlying ground water from contamination. The proposed action includes a double-composite liner system, leachate collection system, horizontal and vertical gas collection system wells, and a UZM system for early detection, should the remote possibility of a gas or liquid release occur from the landfill. The proposed liner system exceeds the requirements of Subtitle D and CCR Title 23.

2. A detailed analysis of the evaluation of the Rail•Cycle-proposed liner system has been conducted by Rust Environment and Infrastructure (Rust, 1993a). Also included in the Rust report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned at 0.003 to 0.6 gallons acre/year, depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

3. The ground water monitoring system and the UZM system would assure early detection of any such release. In accordance with Subtitle D and CCR Title 23, should a release occur, Rail•Cycle would be required to implement an appropriate corrective action plan in consultation with the RWQCB to protect ground water quality within the Bristol Basin.

4. Even if a breach in the landfill liner should occur, the direction of ground water flow at the proposed site is south towards Bristol Dry Lake. The agricultural lands (i.e., CLC) referred to by this comment are located two to three miles east of the proposed site. The wells that provide water for the agricultural lands are located approximately five miles east of the proposed site. With the southerly flow of ground water at the proposed site, the agricultural lands are not downgradient of the proposed landfill. Due to the direction of ground water flow, the agricultural lands could not be affected by materials deposited at the proposed landfill.

5. In addition, substantial analysis has been conducted to provide the assurance that significant threats to either the quality or quantity of the nearby Cargill brine resources would occur as a result of the proposed landfill. The results of the follow-on field work, computer modeling, and other analyses were summarized in Chapters 4.2 and 5.2 of the Supplement. The analysis in the EIR/EIS does not identify significant impact to the ground water or brine quality. This Final EIR/EIS contains mitigation measures designed to protect surrounding uses, including the Cargill and CLC operations, from adverse impacts. Based on this evaluation, the proposed action would be compatible with calcium chloride production and nearby agricultural uses.

6. By providing comments on the Supplement, the Citizens for a Better Environment have been included in the mailing list for matters regarding this EIR/EIS for the proposed project. As noted in the Draft EIR/EIS, the Supplement and this Final EIR/EIS, publicly-available information regarding this EIR/EIS is available for review at the County Planning Department in San Bernardino, California, and at the BLM California District Office in Riverside, California.

NEWBERRY SPRINGS
HARVARD PROPERTY OWNERS ASSOCIATION
P.O. Box 176, Newberry Springs, CA 92365

January 18, 1994

County of San Bernardino
Planning Department
385 N. Arrowhead Ave, 3rd Floor
San Bernardino, Ca 92415-0182
Attention: Mr. Randy Scott

SUBJECT: RAIL CYCLE - BOLO STATION LANDFILL, SUPPLEMENT TO DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT

Dear Mr. Scott:

Our comments into the Rail Cycle Supplemental Draft EIR/EIS are these:

1--Page 1-3 says that the BLM, and the applicant, propose to transact a land exchange, and reclassify some BLM lands at the Bolo Station site to accomodate this particular applicant. As proposed, a significant portion of the project would be sited on what is now BLM managed federal lands, which is designated Limited Use in the California Desert Conservation Area (CDCA) Plan (1980). The CDCA Plan quite clearly states that no new non-hazardous waste disposal sites will be permitted in the Limited Use land category. ①

2--Has any member of Congress given the county, or the applicant, or the BLM, the slightest indication that Congress might be willing to amend the CDCA Plan in order to accomodate this particular waste disposal site?

3--If so, can you please identify that member(s) of Congress?

4--Absent some letter of intent from a member of Congress supporting the proposed amendment to the CDCA Plan, we recommend that the project be scaled back so as not to include any public lands in the Limited Use category.

5--Page 1-3 describes the affected Limited Use public lands as being 1 1/2 sections. However, if sections 8, 15 and the west 1/2 of section 22 are all part of the project, shouldn't they be identified as 2 1/2 sections? ②

6--Page 3-21 very briefly touches on an alternative to the applicant's proposed landfill. That alternative, a waste to energy facility, could very easily be an environmentally superior alternative to this project, yet it quite obviously has not been examined in the Draft EIR/EIS, or the Supplement thereto. We believe that said failure to fully examine the feasibility of a waste to energy alternative at Bolo Station, and at other locations in Los Angeles and Orange Counties, is in violation of the California Environmental Quality Act (CEQA), and the case law which has developed around CEQA. ③

7--Waste to energy incinerators, posing no threat to groundwater, and minimal air pollution, have been engineered, developed and proven to be environmentally superior to landfill disposal, in the countries of Belgium, Netherlands, Switzerland and Japan, among others.

This Draft and Supplemental EIR/EIS have failed to examine and compare these alternate technologies to the Rail Cycle project proposal. In order to bring this project application into compliance with CEQA, this needs to be done in another Supplemental EIR/EIS. ③ CONT.

8--Is the Bolo Station site in a closed groundwater basin? If not, we think that alternate sites in closed groundwater basins should be considered in another Supplemental EIR/EIS, in the event that applicant refuses to adopt the superior waste to energy incineration disposal process. ④

9--Groundwater at the Bolo Station site is as shallow as 40 feet in certain areas. Wouldn't it be preferable, from the standpoint of avoiding groundwater pollution, to consider alternate sites where groundwater is more than 500 feet below ground surface? New alternate sites, where groundwater is more than 500 feet below ground surface, need to be considered in a new Supplemental EIR/EIS, in the event that applicant refuses to adopt the superior waste to energy incineration disposal process. ⑤

10--Is there any chance at all that leachate escaping from the site could make its way to the Colorado River, either by underground flow, or surface flow in connection with a 10,000 year storm event? ⑥

11--Page 4.2-1 says the applicant has computed how a 100 year storm event might affect the project site, and that there is nothing to worry about. But isn't a 100 year storm flow projection very reckless to use, when everyone knows that this mountain of trash, gas and leachate, and assorted hazardous waste which gets past the screening process, will be with us forever--or at least until some massive flood event carries everything away to parts unknown?

Whether this project should be engineered to protect itself from a 10,000 year storm flow, can for the moment, be left open to debate. However, the public has a right to know, and a new Supplemental EIR/EIS needs to explain what might happen to this project, as presently engineered, during operation, and after closure, if impacted by a 10,000 year storm flow. ⑦

12--Is anyone in the engineering world, or the academic world, willing to guarantee that Bolo Station will not experience a 10,000 year storm flow before the year 2000? ⑧

County of San Bernardino
Planning Department
January 18, 1994
Page 3

13--In regards the liner that is intended to prevent leachate from entering the groundwater beneath the site, what sort of manufacturer's guarantee comes with the liner? Could the full text of that guarantee, if any, be printed in the Final EIR/EIS? ⑨

14--Isn't it a fact that all liners can be expected to rupture, due to one factor or another? Isn't this a very good reason to consider the alternative waste to energy disposal technology, which has so far been ignored by this applicant? ⑩

15--Is it anywhere written that San Bernardino County has to provide landfill space to accomodate Los Angeles and Orange County? ⑪

16--If not, wouldn't this project discourage recycling of waste in Los Angeles and Orange Counties, and other areas, by offering them a less expensive option of bury-and-forget-about-it in a neighboring less sophisticated county? ⑫

17--CEQA requires that cumulative negative impacts be calculated and mitigated. Please identify all waste disposal sites in the application stage, along with the various like proposals in the pre-application phase, which are nevertheless known to the county, for the eastern desert and western desert areas of California.

Now, if all these projects are built, and if the Eastern and Western California deserts are simultaneously struck by a series of earthquakes, on three or four major faults, in the range of Magnitude 7 or above (as charted on Page 5.2-11 of the Draft EIR/EIS), and these earthquakes occur during a 10,000 year flood event, please explain what sort of dispersal of waste off-site, and water contamination that we might be looking at. ⑬

While this scenario is unlikely, who can say that it won't happen?

18--After the above requested calculations have been made, how much might these negative environmental impacts be reduced, if this project and all the others, were developed as energy to waste disposal systems, as opposed to landfills and repositories? ⑭

19--This project is located entirely within the Amboy Crater Volcanic Zone. Unless we are mistaken, this subject has not even been mentioned in the Draft EIR/EIS or the Supplemental EIR/EIS. So that you may inform yourselves on this subject, we refer you to Kilbourne and Anderson (1981), and Chesterman (1982). ⑮

County of San Bernardino
Planning Department
January 18, 1994
Page 4

May we also refer you to U.S. Geological Survey Bulletin 1847, titled Potential Hazards from Future Volcanic Eruptions in California. Plate 1 shows the entire project site within a volcanic zone.

A new Supplemental EIR/EIS needs to examine how expected volcanic eruptions at Amboy Crater will impact this project. ⑮ CONT.

20--The San Bernardino County Solid Waste Management Department has a dismal record and reputation in this community. It is our understanding that all or nearly all the landfills in the desert area of the county are in violation of state environmental laws. In addition, this county agency has created a massive illegal trash dumping situation in this community by illegally closing our county landfill in January, 1991, without submitting the closure to the CEQA review process. As result, this community now has approximately no less than 2 dozen illegal and informal trash disposal sites: alongside roads, in empty private lake basins, in the Mojave River bed, and on properties belonging to absentee owners, and on federally managed lands. All this was very foreseeable, including that some persons would engage in the business of burying hazardous waste on unoccupied properties owned by others. ⑯

We owe all this environmental carnage to the San Bernardino County Solid Waste Management Department. Whether this project, or an alternative waste to energy disposal project is approved, we strongly recommend that some other more responsible government agency have jurisdictional control of the operations of the project.

Thank you for your consideration of these matters, and we look forward to your replies in a new Supplemental EIR/EIS.

Respectfully,

Hildamae Voght
Hildamae Voght
Executive Secretary
619-257-3350

cc: jerry lewis
cc: henri bisson
cc: kathleen honeycutt
cc: don rogers
cc: marsha turoci
cc: barbara boxer

DOCUMENT S-31
NEWBERRY SPRINGS
HARVARD PROPERTY OWNERS ASSOCIATION
RESPONSE TO COMMENTS

Response S-31-1

1. Regarding the public lands proposed for exchange, Section 15 and the western one-half of Section 22 of the proposed site are Class L, and Section 8 is Class M. As described in the Draft EIR/EIS (Sections 3.2 and 5.14), for the proposed landfill to occur, these lands would be exchanged for privately held lands near Cadiz Dunes, in Piute Valley, and Fenner Valley, which are surrounded by Class L and M lands. Once the land exchange occurred, Sections 8, 15 and the western one-half of Section 22 would be in private ownership and the Class L and M land use designations would no longer be applicable. There would not be a land use conflict in developing a landfill on these lands. In exchange, the public would receive the benefit of acquiring additional acreage of greater wildlife habitat value and consolidation of ownership of public lands.

2. The exchange of public lands for private land is an administrative action overseen by the BLM that does not require the involvement or approval of Congress. Likewise, the amendment of the CDCA Plan does not require the involvement or approval of Congress.

Response S-31-2

1. As noted in Response S-31-1, the sections of public lands within the proposed site that are designated as Limited Use (i.e., Class L) consists of Section 15 and the western half of Section 22. The other section of public lands within the proposed site (i.e., Section 8) is designated as Class M.

Response S-31-3

1. A clarified discussion of project alternatives was provided in Chapter 3.0 of the Supplement. This discussion clarifies how project alternatives were developed, evaluated, and rejected or selected for further analysis, as well as the alternative site selection process. The operational criteria used for initial site selection are those determined by Rail•Cycle and concurred on by the County and BLM to be fundamental to successful operation of an environmentally safe rail-haul landfill. These criteria are applied objectively through the EIR/EIS process identify potential sites which may reduce or eliminate significant environmental effects of the proposed action.

2. Potential alternatives were identified based on specific siting, design and operational criteria for a rail-haul landfill. These criteria were applied to a regional map to screen out unsuitable sites. Sites that met basic siting and operational criteria then underwent a second-tier review, which evaluated site-specific environmental concerns. Based on this evaluation, specific alternative sites were selected to be evaluated in detail in the EIR/EIS. For detailed information on how alternative sites were developed, evaluated and rejected or selected for further analysis in the EIR/EIS, see Section 3.7 of the Draft EIR/EIS and Section 3.3 of the Supplement.

3. Nonlandfill disposal (including alternative technologies, such as waste-to-energy, and alternative waste management practices, such as increased recycling) was not considered to be a potential alternative to the proposed action due to its inability to meet the basic objective to provide an environmentally safe landfill disposal option to southern California communities after they have met the requirements of AB 939. As discussed in Chapter 2.0 of the Supplement, even with full implementation of AB 939's mandated diversion programs, there will remain a need for substantial additional landfill capacity to serve southern California communities. The proposed action, which was developed in response to a request by the Los Angeles County Sanitation Districts for long-term landfill capacity, would meet that need by helping satisfy the state's requirements, mandated by AB 939, for cities and counties to provide, at their discretion, environmentally safe landfill disposal as a solution to solid waste that cannot otherwise feasibly be reduced at the source, recycled or composted.

4. Alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant unavoidable environmental impacts than the proposed action. For more information on this issue see Section 3.3 of the Supplement.

Response S-31-4

1. As noted in Section 4.4.2.1.1 and 4.4.2.1.2 of the Draft EIR/EIS, the most recent data available for

the region in which the proposed site is located supports the finding that both the Bristol and Cadiz Basins are hydrologically closed, internally draining basins. Geologic barriers prevent ground water from flowing out of these basins.

Response S-31-5

1. Since, as discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the landfill liner system proposed by Rail•Cycle has been designed to protect underlying ground water from contamination, there is no need to consider an alternative site which has a greater depth to ground water. The proposed action includes a double-composite liner system, leachate collection system, horizontal and vertical gas collection system wells, and an UZM system for early detection should the unlikely possibility of a gas or liquid release occur from the landfill. The proposed liner system exceeds the requirements of Subtitle D and CCR Title 23.

Response S-31-6

1. As noted in Response S-31-4, both the Bristol and Cadiz Basins are hydrologically closed. Available literature concludes that geological barriers prevent ground water flow from these basins towards the Colorado River.

Response S-31-7

1. The Draft EIR/EIS and Supplement for the proposed Rail•Cycle-Bolo Station Landfill project provides conservative assumptions and impact analyses of each environmental topic. The EIR/EIS evaluates potential events considered as "reasonably foreseeable." Project design and mitigation measures were also determined on regulatory requirements, and conservative values and standards. For example, Subtitle D and CCR Title 23 require that Class III landfills be protected by the 100-year flood.

2. NEPA (40 CFR 1502.22) defines "reasonably foreseeable" impacts to include those which may have catastrophic consequences. However, it does not require that events which are catastrophic and not "reasonably foreseeable" be investigated. For example, the occurrence of a 10,000-year flood is by definition extremely remote and not within the realm of "reasonably foreseeable."

3. Similarly, CEQA requires that the greatest emphasis should be placed on those impacts that are most significant and most likely to occur (Remy, Thomas, & Moose, 1992). Section 15145 of the CEQA Guidelines states: "If after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact." This section is necessary to relieve the lead agency from a requirement to engage in idle speculation (Remy, Thomas, & Moose, 1992).

Response S-31-8

1. See Response S-31-7.

Response S-31-9

1. There are various manufacturers of FMLs, and it is not known which one may supply the liner for the proposed Bolo Station Landfill. Each manufacturer provides quality assurance/quality control data and specification for their liners.

Response S-31-10

1. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the landfill liner system proposed by Rail•Cycle has been designed to protect underlying ground water from contamination. The proposed action includes a double-composite liner system, leachate collection system, horizontal and vertical gas collection system wells, and a UZM system for early detection, should the remote possibility of a gas or liquid release occur from the landfill. The proposed liner system exceeds the requirements of Subtitle D and CCR Title 23.

2. A detailed analysis of the evaluation of the Rail•Cycle proposed liner system has been conducted by Rust Environment and Infrastructure (Rust, 1993a). Also included in the Rust report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned at 0.003 to 0.6 gallons acre/year, depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

3. As noted in this comment, landfill liners may leak. Based on an exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However, the authors clearly make a distinction between liners and liner systems, and further, state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that: "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions." The text makes it clear that it is inaccurate to conclude that liner systems cannot prevent water quality degradation.

4. The ground water monitoring system and the UZM system would assure early detection of any such release. In accordance with Subtitle D and CCR Title 23, should a release occur, Rail•Cycle would be required to implement an appropriate corrective action plan in consultation with the RWQCB to protect ground water quality within the Bristol Basin.

Response S-31-11

1. The issue raised by this comment is a policy matter rather than an EIR/EIS issue. The County Planning Commission and the Board of Supervisors will address this policy issue as part of their consideration of this EIR/EIS.

Response S-31-12

1. Compliance with AB 939 requirements is the responsibility of local jurisdictions. Part of that compliance includes assuring 15 years of disposal capacity for solid waste that cannot otherwise be diverted through source reduction and recycling. As discussed in Chapter 2.0 of the Supplement, even with full implementation of the diversion requirements of AB 939, a need will exist for substantial amounts of additional landfill capacity to serve the communities of southern California. The proposed Bolo Station Landfill would meet part of that need by providing a disposal option for solid waste that cannot be diverted.

2. Waste transported to the Bolo Station Landfill would consist of post-recycled residual waste reflecting the AB 939 diversion programs implemented by the cities and counties from which the waste originates. As compliance with the requirements of AB 939 rests solely with cities and counties, it is anticipated that the cities and counties that may use the Bolo Station Landfill would be in compliance with AB 939 with or without the assistance of the network of MRFs that may be part of the Rail•Cycle system.

3. Private projects such as Rail•Cycle can assist cities and counties in meeting AB 939 through contracts that provide specific services or components within the jurisdictions implementation program. For example, a city contracting with a Rail•Cycle MRF for processing and disposal of waste may negotiate a certain level of recovery for specific waste stream components. Such a contract may make Rail•Cycle responsible for a portion of the city's AB 939 diversion requirement and allow the city to demonstrate the 15-year disposal capacity requirement of AB 939. However, such a contractual arrangement does not relieve the city from its ultimate responsibility for compliance with AB 939. There is no evidence to support the suggestion made by this comment that the Rail•Cycle project would result in a disincentive for compliance with AB 939.

Response S-31-13

1. Section 3.7 of the Draft EIR/EIS and Section 3.3 of the Supplement identify the other major rail-haul landfill projects being considered in the desert area of California (i.e., the proposed Eagle Mountain Landfill in Riverside County and the proposed Mesquite Regional Landfill in Imperial County).

2. As noted in Response S-31-7, CEQA and NEPA do not require that events such as a 10,000-year flood, which are catastrophic and not "reasonably foreseeable", be analyzed as part of an EIR/EIS.

Response S-31-14

1. See Response S-31-3.

Response S-31-15

1. As noted in Section 4.2.1.1 of the Draft EIR/EIS, the Amboy Crater is located approximately seven miles west of the Bolo Station site. As discussed in Section 5.2.1.4 of the Draft EIR/EIS, Amboy Crater and the surrounding volcanic field is an area that is subject to potential hazards from volcanic eruptions. The probability for renewed activity at the Amboy volcanic field is considered to be low. Although several recorded earthquake epicenters (greater than M3.0) may be related to the Amboy volcanic area, earthquake swarms or other precursors of volcanic activity have not been recorded in the last 200 years (Jacobs, 1991b). In the unlikely event of an eruption, the site area

south of ATSF railroad tracks may be subject to basaltic lava flows (Jacobs, 1991b; Miller, 1989). Potential volcanic ejecta or tuff deposits from a renewed volcanic activity are not expected to pose potential hazards beyond the Leslie Salt operations at Saltus (about 2.5 miles west of the western Bolo Station site boundary).

Response S-31-16

1. This states the opinion of the commenter, but does not provide a specific comment regarding environmental issues associated with the proposed project or regarding the information included in the Supplement. No specific response is required.

S-32

Friends of San Gabriel River
POST OFFICE BOX 4134
WEST COVINA, CA 91792
PHONE 818-919-8327

January 24, 1994

County of San Bernardino, Planning Dept.
385 N Arrow Ave. Third Floor
San Bernardino, Calif. 92415-0182

Attn. Mr. Randy Scott

Reference: Supplement to EIR for Rail Cycle - Bolo Station Landfill

Dear Sir:

Upon review of the referenced Supplement to EIR we are convinced the public has been properly informed of the consequences of building Bolo Station Landfill. The possible overdraft of the groundwater with proposed increased agriculture in the area is not significant compared to the benefits to Southern California if Bolo Station Landfill is permited by your agency. The natural physical condition of the basin indicates this is a proper area for disposal of chemicals and garbage. Bristal Dry Lake is an accumulation of naturally occuring chemicals and with the landfill would only continue to serve this function. Thus we urge your agency to approve the EIR with its Supplement and forward it to the Board of Supervisors with a recomendation to approve the project, certify the EIR, and issue permits to allow construction of the Bolo Station Landfill. ①

Please inform us at the above address when the subject of the Bolo Station Landfill will be heard by the Planning Commition and the Board of Supervisors.

Very truly yours,

Warren G Wanka

Warren G. Wanka

DOCUMENT S-32
FRIENDS OF SAN GABRIEL RIVER
RESPONSE TO COMMENTS

Response S-32-1

1. This letter supports the proposed Rail•Cycle - Bolo Station Landfill. As it does not provide comments regarding the information included in the Supplement, no specific response is required.

SECTION 3.5

INDIVIDUALS
COMMENTS AND RESPONSES

Lynnette Shmakoff
P.O. Box 2183
Twentynine Palms, Ca 92277

January 31, 1994

Attention: Mr. Randy Scott
County of San Bernardino
Planning Department
385 North Arrowhead , 3rd Floor
San Bernardino, Ca 92415-0182

Dear Mr. Randy Scott;

I want to express my opposition to the Bolo Station Landfill (Rail Cycle) near Amboy.

It is preposterous to site a landfill of any type near a water supply or farmland.

The EIR states that proponent will initially be pumping 1,400 gallons of water per minute for the first 90 days and then 70 to 100 gallons per minute for the active life of the landfill which would be 60 to 100 years. We need every drop of water for human consumption. the nonpotable water can be treated for our needs. water is a precious resource. ①

The construction of this landfill would bring predators (namely ravens) giving them carte blanche to dine on the young tortoise and the agriculture in the area .I also find it amusing to think that the employee's are going to spend their time watching for trespassing tortoise's while they are being paid to work. ②

The dozens of trains and trucks traveling to Bolo will destroy the pristine air with diesel fuel emissions for that basin and other outlying areas. ③

It is time for the other Southern California Counties to learn how to reduce waste, not generate it. ④

The City of Long Beach has an incinerator that can reduce waste to steam and I understand that it is always hungry, so let the waste generating people learn to be responsible for themselves, let them truck it to Long Beach. The Citizens of our county should not have to be burdened with the trash from the irresponsible people from Los Angeles and Orange Counties. They need to learn how to reduce and manage their own waste, not ship it off to our desert . ⑤

It will be criminal for the County of San Bernardino to allow this project to proceed . Waste Management Inc of North America is a partner of the proposed RailCycle and has been convicted of antitrust, environmental, and public corruption violations and has created over 80 Superfund clean-up sites. ⑥

If this counties government approves the proposed Bolo Station Landfill/RailCycle , it will be evoking another lawsuit.

Cordially,
Lynne Shmakoff
Lynne Shmakoff

DOCUMENT S-33
LYNETTE SHMAKOFF
RESPONSE TO COMMENTS

Response S-33-1

1. As indicated in Section 5.2.1.2.1 of the Supplement, ground water modeling conducted for the proposed project indicates that the ground water pumping of 130 acre-feet per year for onsite uses would not adversely affect other ground water users in the area (i.e., Cargill, National Chloride, or CLC). However, as described in Section 4.2.2 of the Supplement, the ground water recharge rate in the basin is uncertain, and proposed future ground water use for the CLC agricultural operation is substantial. Cumulative project impacts to the ground water basin, primarily due to CLC, may result in overdraft of Bristol Basin. In the event the Bristol Basin is in overdraft, the use of 130 acre-feet of water per year by the proposed landfill would be considered an unavoidable adverse impact.

2. Even though the proposed Bolo Station Landfill has a relatively low water use rate (i.e., approximately 130 acre-feet per year), when this is combined with the proposed 30,000 acre-feet per year that would be used by CLC (URS, 1993) and the current water withdrawn by Cargill and National Chloride, this represents a cumulative significant adverse impact (see Section 6.2.3.2 of the Supplement). If the CLC expansion goes forward as planned, this significant adverse impact would occur whether or not the proposed Bolo Station Landfill is operational.

Response S-33-2

1. The control of ravens and other bird species was discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. As stated in these sections, standard landfill operations would be employed (i.e., compaction of waste at the working face, periodic application of cover material during the day, maintaining a small working face, and an active litter control program) that are expected to be effective in limiting the attractiveness of the site to ravens and other birds. In the event ravens or other bird species are attracted to the site, various measures would be implemented on an as-needed basis to prevent bird populations from becoming established at the landfill. Section 5.6.5 of the Draft EIR/EIS included specific mitigation measures that would be implemented if ravens or other birds are found to be attracted to the site. These measures included, but are not necessarily limited to, the use of an overhead nylon line grid system (bird wires), distress tapes, propane cannons, and racket bombs. The effectiveness of these measures would be monitored and, if these measures are found not to be completely effective, additional measures would be developed by Rail•Cycle in consultation with BLM, USFWS, and CDFG.

2. In addition, Rail•Cycle, in consultation with BLM and USFWS, conducted a baseline raven study that included an area within a 30-mile radius of the proposed site. This study began in December 1992 and continued through December 1993. Monthly surveys documented raven (as well as other bird species) populations and usage patterns in the study area. Baseline data will be compared to data collected during the operation of the proposed landfill. If comparison of data finds that ravens are being attracted to the site or if an increase in ravens in the general area can be attributed to the landfill, additional mitigation measures would be implemented at the landfill in consultation with BLM, USFWS, and CDFG.

Response S-33-3

1. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMDs Air Quality Attainment Plan related to emission reductions for ozone precursors.

2. As noted in Section 5.4 of the Supplement, the estimate of combined NO_X and ROG project emissions at full development of the proposed project in the year 2010 is 1.7 tons/day, representing an increase in the current planning inventory baseline of 0.6 percent. To the extent that these emissions are not offset or mitigated in attainment plans adopted by the MDAQMD, these emissions could delay attainment of ozone standards.

3. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants.

Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response S-33-4

1. Rail•Cycle, the County, and BLM acknowledge that provision of, and commitment to, alternative waste management practices is an important goal as the state's population continues to grow and the amount of solid waste generated increases. A commitment to achieving this goal has been established by the California legislature through AB 939, which requires that cities and counties divert 25 and 50 percent of their waste stream through source reduction and recycling by 1995 and 2000, respectively.

2. In implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:
   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and environmentally safe land disposal at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed of by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or environmentally safe land disposal, or both.

4. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation District for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

5. The purpose and need analysis for the proposed action (Chapter 2.0 of the Supplement) confirms that, even with implementation of the most stringent existing regulations for waste diversion, additional landfill capacity will be required to meet the daily volume of waste generated by southern California.

Response S-33-5

1. Regarding the commenter's opinion concerning the solid waste incinerator in Long Beach, the incinerator has a capacity of only 1,500 to 2,000 tons per day. While a part of the solution for managing solid waste in southern California, the incinerator is not able to handle the volumes of waste that require disposal.

2. Alternative disposal technologies were evaluated in Section 3.7 of the Draft EIR/EIS and Section 3.3 of the Supplement. As noted in the Supplement, alternative disposal technologies were eliminated from further detailed analysis because of their inability to meet the need for additional landfill capacity and because it is likely that they would not result in fewer significant, unavoidable environmental impacts than the proposed action.

Response S-33-6

1. While this comment does not raise a specific issue regarding the information included in the Supplement, the environmental record of a project proponent may be considered by the decision makers during their evaluation of the EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific requirements of state and federal regulations that are included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring Program for the proposed action in accordance with Section 21081.6 of the California Public Resource Code. This program will assure that the mitigation measures included in the Draft EIR/EIS, the Supplement, and this Final EIR/EIS are implemented.

S-34

February 8, 1994

Mr. Randy Scott, Senior Planner
County of San Bernardino Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182

RE: Comments on Supplement to Draft EIR/EIS for Rail-Cycle/Bolo Station Landfill

Dear Mr. Scott:

I disagree with two points in the Supplement:

1) Burying an Existing Desert Environment is an Unavoidable Adverse Impact ("Vegetation" and "Wildlife" sections of Appendix B: Table 1.1--Summary of Impacts, Mitigation Measures, and Unavoidable Adverse Impacts). I recommend we use already degraded sites (such as Eagle Mountain). ①

Plants and animals would be destroyed during the many years operation of the landfill. The desert environment takes longer to recover than other environments after it has been disturbed. Even after "recovery," 2,400 acres would be underlaid with trash producing air and water pollution. This would be a significantly inferior environment to the present one.

2) Increase in Landfill Capacity Causes "Demand" for Increased Capacity (Section 2.0: Purpose and Need for the Proposed Action). Landfills should be placed near communities that demand them so that we may take literal and symbolic responsibility for our waste. ②

People will use landfills that are made available to them. Very little about current waste generation is inevitable. This section justifies current wasteful uses of our lands.

Sincerely,

Andrew Vesselinovitch
Symposium Coordinator, Mission Housing Development Corporation
Project Intern, The Trust for Public Land
Acting Chair, San Francisco Bicycle Advisory Committee
117 Fillmore Street
San Francisco, CA 94117
415/621 6339

DOCUMENT S-34
ANDREW VESSELINOVITCH
RESPONSE TO COMMENTS

Response S-34-1

1. The criteria upon which potential alternative sites were evaluated and eliminated or recommended for further analysis were described in Section 3.7 of the Draft EIR/EIS and Section 3.3 of the Supplement. These criteria were developed based in part on Rail•Cycle's objectives for the proposed action as well as the feasibility for Rail•Cycle, as a private venture, to implement the project. Because another private venture (i.e., Mine Reclamation Corporation) is proposing to develop the Eagle Mountain site as a rail-haul landfill, this site is not available for Rail•Cycle to acquire and does not represent a reasonable, feasible alternative to the proposed action. Therefore, rather than an alternative to the proposed action, the proposed Eagle Mountain Landfill is considered as a cumulative project within this EIR/EIS.

2. If this EIR/EIS were evaluating potential alternatives to a public project proposed by a public agency with the power of eminent domain, then site ownership or the ability to acquire a site would not necessarily be a determining criterion, as the agency could condemn the land. In the case of the proposed action, it would not be reasonable to evaluate a site in detail that cannot reasonably be acquired by the applicant for the proposed action.

Response S-34-2

1. While certain types of projects are known to create a "demand" for development, their is no evidence that by providing capacity for the disposal of solid waste that a landfill results in an increase in the volume of solid waste generated.

2. Through its passage of AB 939, the California Legislature has reaffirmed that each community must take responsibility for the waste it generates. As discussed in Chapter 2.0 of the Supplement, in implementing AB 939, cities and counties are required to promote the following waste management practices, in order of priority:

   - Source reduction.
   - Recycling and composting.
   - Environmentally safe transformation and land disposal at the discretion of the city or county.

3. Cities and counties are further required to maximize the use of feasible source reduction, recycling and composting options to reduce the amount of solid waste that must be disposed by transformation and land disposal. For wastes that cannot be feasibly reduced at their source, recycled or composted, the city or county may use environmentally safe transformation or land disposal, or both.

4. In addition to this source reduction and recycling element. AB 939 requires cities and counties to demonstrate 15 years of solid waste disposal capacity. As discussed in Chapter 2.0 of the Supplement, the projected solid waste disposal capacity shortfall, after AB 939-mandated source reduction and recycling requirements have been met, is expected to be about 16,800 tons per day in metropolitan Los Angeles County alone by 2008. This shortfall in metropolitan Los Angeles is projected to increase to approximately 35,000 tons per day by 2014 (see Table 2.3 of the Supplement). This need, when considered with the eight years of remaining capacity in San Bernardino County (see Table 2.1 of the Supplement), indicates that two regional landfills on the scale of the proposed action may be needed to enable southern California jurisdictions to fulfill their AB 939 landfill capacity requirements.

5. The Bolo Station Landfill has been proposed in response to a Request for Proposals issued by the Los Angeles County Sanitation District for long-term landfill capacity. With its proposed location in an arid desert environment and use of rail-transport of solid waste, the project has been designed to provide an environmentally safe land disposal option for use by cities and counties for residual solid waste that requires disposal after mandated diversion requirements of AB 939 have been met.

S-35

S.B. County Planning Dept.
385 N. Arrowhead Ave., 3rd floor
San Bernardino, CA 92415-0182

We oppose the Bolo Station Landfill, Broadwell Lake Landfill, and any other mega dumps being considered for our desert area.

Any such dump would create noise, ruin our pristine air with deisel fuel pollution, and litter the desert with blowing trash. It would also create a imbalance of nature to an extent not known until after the fact. Water supplies for many thousands of people would be ruined. ①

Tourism, which generates a lot of jobs and tax money for the areawould suffer tremendously. Who wants to pay good money to come across the country or half way around the world to a dumping area to view a pile of trash?

No! to all dumps in our area. Property values would drop. ②

No! All trash must be designed by manufacturers to be recycled. Any that isn't must be incinerated to produce heat and power.

All garbage should be composted and supplied to farmers and gardeners.

Save our desert while it is still possible to do so. ③

Reply requested.

William Pratt
7477 Persia Ave.
29 Palms, CA 92277

K. Pratt

DOCUMENT S-35
WILLIAM R. PRATT
RESPONSE TO COMMENTS

Response S-35-1

1. This comment expresses concern about noise, air pollution, litter, and water pollution from the proposed action.

2. Noise impacts were evaluated in Section 5.13 of the Draft EIR/EIS and Section 5.5 of the Supplement. The estimated cumulative noise impacts associated with the proposed action are not significant and, therefore, no mitigation is required.

3. Mitigation measures for stationary and mobile air emission sources associated with the proposed action were included in Section 5.7 of the Draft EIR/EIS, with additional mitigation measures included in Section 5.4 of the Supplement. However, as noted in the Supplement, even with the implementation of the air quality mitigation measures, the impact would not be reduced to below a level of significance and is considered to be unavoidable and adverse. As part of its consideration of the proposed project, the County Board of Supervisors will determine if the benefits of the project outweigh the significant unavoidable adverse impacts associated with the project.

4. Litter control measures for the proposed Bolo Station Landfill were discussed in Sections 3.3.2.1.4 and 5.8.1.1.5 of the Draft EIR/EIS. The primary litter control method is the periodic application of daily cover as the working face progresses across the active landfill lift. A system of three fences are expected to trap any litter that may be blown from the working face. A full-time litter control team would assure that litter is collected. In addition, the optimum daily size of the working face will be anticipated in a way as to minimize litter.

5. The design features of the proposed landfill (i.e., liner system and ground water monitoring system) and mitigation measures to assure that the quality of ground water in the Bristol Basin is not impacted by the proposed project were discussed in Section 5.4 of the Draft EIR/EIS and Section 5.2 of the Supplement.

Response S-35-2

1. The proposed landfill is sited in an area that has been subject to long-term industrial uses or land alteration practices, and does not involve previously remote or undisturbed areas of the desert.

2. Upon completion of each cell and final closure of the landfill, mitigation measures call for: (1) configuration of the landfill slopes and surface to blend into, rather than contrast with, the existing desert topography, and (2) revegetation with native plant species.

3. Local communities are also expected to benefit from the project through establishment of a state-of-the-art landfill in the area that would deter random and illegal dumping in desert locales, an area of concern for the BLM and County. Additionally, these communities are expected to benefit from the project in future years as existing landfill capacity in the County becomes exhausted over the next eight years.

Response S-35-3

1. Since the passage of AB 939 in 1989, source reduction efforts, recycling programs, and increased government and private sector use of markets developed for recycled products have been initiated in California cities and counties. Information regarding AB 939 waste reduction and recycling requirements, as well as the results of current waste diversion efforts in southern California, were included in Chapter 2.0 of the Supplement.

S-36

February 14, 1994

Heather Hahn
P.O. Box 966
Yermo, CA 92398

County of San Bernardino
Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182
Attn: Mr. Randy Scott

Mr. Scott:

I am submitting the following comments on the Supplement to the Draft EIR/EIS on the Rail Cycle Bolo Station Landfill:

We've been aware of our garbage problem for a long time now, and yet the per capita waste for Californians is increasing. It doesn't sound as if we're taking the problems seriously. If we have a vast new dump to use, we'll have even less motivation to tackle source reduction. We can simply move the problem elsewhere.

The Supplement offers high-tech answers to all the problems inherent to landfills (i.e., methane leakage and water pollution). These may look impressive on paper, but in reality, the inadequacies of these mitigation measures don't show up until the project is completed and in operation. An example is all the flaws found after the many supposedly safe high-tech incinerators have been put on line. Any problems resulting from this mega-landfill will be mega-problems.

There can be no mitigation measures for the increased noise along the railroad corridor. People (myself included) usually live within 800 feet of the tracks because they can't afford to live elsewhere. We will be subjected to additional noise and pollution not because these trains are hauling cargo vital to the commerce of the nation, but because they're hauling this incredible amount of garbage that we haven't figured out anything better to do with. Having trains haul at night isn't a big help in you're awakened by the train whistle blasting at 3 a.m. And even if you don't wake up, sleep is not as beneficial when the sleeper is subjected to noise. ①

San Bernardino County shouldn't become the receptacle for Southern California's trash. Building mega-dumps and importing garbage isn't part of the County General Plan. And transporting garbage to Arizona or Utah if the Bolo Dump doesn't go through is even worse. I support the no action alternative.

Sincerely,

Heather Hahn

DOCUMENT S-36
HEATHER HAHN
RESPONSE TO COMMENTS

Response S-36-1

1. The commenter's opposition to the proposed action is noted. In addition to noting general opposition to the project, the comment expresses a concern over increased noise along the rail lines that would transport waste to the proposed landfill.

2. The impact of increased noise along the railroad corridor was evaluated in Section 5.13 of the Draft EIR/EIS and Section 5.5 of the Supplement. The estimated cumulative noise impacts associated with the proposed action are not significant, and therefore, no mitigation is required.

PO Box 2272
29 Palms, CA 92277
(619) 367-7004

S-37

15 February 1994

County of San Bernardino
Planning Department
385 North Arrowhead, 3rd Floor
San Bernardino, CA 91425-0182
Mr. Randy Scott, Senior Planner

RE: RAIL CYCLE-Bolo Station Landfill

Dear Mr. Scott:

In response to the referenced landfill and the Supplement to the Draft EIR/EIS which I recently reviewed, I ask the record to show my continued opposition of this and all other mega-dumps proposed on San Bernardino County land regardless of the material designated for acceptance.

It's a given you and the other supervisors were elected and assumed responsibility to make hard decisions beneficial to all county residents. Similarly, there have been other officials with authority that made incalculable, disastrous decisions in past years that haunt the citizens throughout the country still today. They too may not have acted prudently, nor to the outcry of the citizens. Let's not make another mistake by considering landfills as the answer to waste disposal from non-county residents. No amount of money, county, state and federal combined, will correct the damage identified as will or could happen from landfills of the nature you are considering at this time.

How can the concerned citizens convince those with decision making authority there are more acceptable, healthier ways for disposing waste of others, rather than building dumps on our desert land? Why would we consider taking the problems of one segment of society and placing them on another? Where did this insane proposal get its roots? Why take in more garbage when we are being asked to reduce and recycle our own? We must create markets now to accommodate our efforts. The devastating environmental effects of mega-dumps must not be allowed to happen anywhere. ①

San Bernardino County has in place the California Integrated Waste Management Board (CIWMB) with responsibility to seek waste management priorities. How is it not a priority to protect the citizens, land, water and air of the county relative to waste, some hazardous in nature, from multiple, outside sources?

Someone has got to be the leader in waste management, and someone has got to say **NO to dumping on the desert.** Let it be the current Board of Supervisors. Take the initiative to be leaders in safe and sane alternate waste disposal solutions. Rather than be known as the county that all others dump on, let's be known as the educated county with foresight to seek the right solution.

I appeal to you once again to study the evidence presented, and make an educated decision that meets the health and land needs of the San Bernardino citizens.

DJMasker
D. J. MASKER

DOCUMENT S-37
D. J. MASKER
RESPONSE TO COMMENTS

Response S-37-1

1. This letter states the commenter's opposition to the proposed action, but does not provide specific comments regarding environmental issues or information provided in the Supplement. No specific response is required.

February 16, 1994

County of San Bernardino
Planning Department
385 North Arrowhead, 3rd Floor
San Bernardino, CA 91425-0182
Attn: Mr. Randy Scott

RE: COMMENTS, DRAFT EIR/EIS SUPPLEMENT FOR THE RAIL/CYCLE BOLO STATION LANDFILL PROPOSAL

To Whom It May Concern:

Reviewing the comments I sent in on the original RailCycle Draft EIR just about a year ago, I feel as though I could almost just send you a copy of the same letter with today's date on it. I have duly noted the updates and changes and additional unavoidable adverse impacts contained in the supplemental draft. I maintain that we still are pursuing the wrong question. Following are more specific responses to the supplemental draft.

I see again nowhere addressed the criminal and environmental record of Waste Management of North America, Inc. (WMNA). I do not see addressed the eventual environmental impacts of the patent intent of WMNA to make a monopoly of waste management in San Bernardino County. The maneuvering to dismantle our county's current solid waste management system and to prevent development of an improved county system for the future is obvious to the observer. For example, the county is currently looking at closing the perfectly serviceable 29 Palms landfill and other local landfills for "cost" (centralizing) reasons in a move that will eventually make dumping county garbage at Bolo Station our "only" option. It is also clearly stated in the EIR that Bolo is reserving space for 6,000 tons daily of San Bernardino County trash, and it is common knowledge that WMNA is demanding S.B. County make a deal to eventually put all it's garbage in Bolo.

This is way out of line. Let's stop and remember a second: It isn't San Bernardino County that needs Bolo for it's trash. We have plenty of other options still - much better options. This whole situation is having an unacceptable and destructive influence on the discussion and future of waste management for the County of San Bernardino itself. What's going on here? These are monopolistic practices that most certainly will lead to a death-grip on our environment. This must be addressed. It is unacceptable to not include the record and practices of WMNA as part of an environmental assessment. ①

I said before that the mitigation measures proposed for raven control were voodoo pest management. Absolutely nothing has changed. The people involved still have no idea how to control the ravens because they can't be controlled. The mitigation tactic here is mere postponement of the real discussion until doomsday. The ravens will come to this dump, and they'll eat juvenile tortoises while they're at it. The only way to avoid this syndrome is to not put the dump in. Kind of simple, really. The dump doesn't belong there. I will allow others to point out more completely that critical habitat for the desert tortoise has indeed now been designated within the distance of raven range from the proposed dump. Oops. Small problem. That's a discussion I expect the County and other involved agencies will have plenty of opportunity in the future to explore in depth, whether they want to or not.

Just in passing, I still haven't seen a thing in the draft or the supplement that convinces me wind-blown litter will not be a problem. The supplement did not expand on this challenged issue at all. The original objections on that matter remain unaddressed.

The items that the EIR concludes are unavoidable adverse impacts I heartily concur with, and all of these may be considered to hereby be reiterated in my objections to the project. I would only add that they are, in fact, insurmountable, and in the face of these impacts the project cannot be justified. Or "mitigated." Or "overriding concern-ed." I'm glad that we've 'fessed up this time to a clearer picture of the groundwater overdraft involved. As a desert resident, I find this proposed overdraft unacceptable and reject the Bolo project on those grounds, alone.

Regarding the seismic assessment, however, I would note that recent earthquake activity in Southern California and the desert region make any dump siting an unreliable proposition. We have clearly seen how seismic "science" is still an infant. There's too much we don't know to conclude any seismic assessment is truly reliable. ① CONT.

Regarding the EIR's assessment for paleontological and cultural resource value, I would disagree that this is complete. The measure of a land is not always what you know humans to have done on it, even less the material evidence of them you can find. Some things simply are not quantitatively measurable, and our society must accept that. What about those of us desert Americans who at this moment find this land sacred? It's openness, it's "visual resources", a religion? Why do you suppose a lot of desert people live out here? This is our theater and our temple. The makers of the EIR sound as though they believe having exhibits at an on-site visitor center is an adequate substitute for the intrinsic cultural and historical and religious value of the great open land as it is. Wrong. If this dump goes in the actual cultural/historical/paleontological values will have been assassinated. And the visitor's center will be a graveyard. Stay off this land.

Above all, although the EIR tried to go into greater detail on the "need" for this dump, nowhere again does it address the basic issues: anthropocentric uncontrolled growth of population and development. Societal cancer. How is Los Angeles County planning on limiting and controlling itself? All these boondoggle AB 939 (written by WMNA) measures to encourage source reduction and recycling is way too little, hon, and way to late. These little smiley face promises don't justify me and the desert spending the next 100 years in L.A.'s sludge. It's a cliche, but damn true: Poor planning on your part does not constitute an emergency on my part. Especially when the poor planning is continuing, and no one is seriously addressing the overgrowth of the Southern California metropolitan areas.

S-38

I don't meet anyone in L.A. who is giving an instant of thought to their trash - where it's going, how they can cut back, etc. How come I'm having to spend so much of my time thinking about their trash? Something is wrong here, baby! I repeat, AB 939 is a boondoggle for the benefit of WMNA. It does not seriously address waste issues in this state, and cannot be accepted as justification for locating this dump in San Bernardino County.

Ultimately, the only reasonable question to be asking is not, I repeat and have stated before, where in the desert to put outlying trash. That is the question of a small-minded, short-sighted, obsessive people. Techno-drunk children who want unlimited license to play with more and better, more and better, more and better toys, and throw the trash and everything unpleasant in their neighbor's yard. It is laughable but deadly for leaders to pretend to seriously be part of such an unintelligent discussion. Forget your "answers" to the problems, folks. Go back home, think about it long and hard, and see if you can come up with the right question. Then we'll talk about answers. ① CONT.

In closing, if you make this dump you'd better leave a little room in it for my dead body, because that's what it's going to take to get that dump put in. We don't want it here. I don't know anyone who lives out here who wants it in the desert. We are almost to a one insulted beyond measure. Mother Nature doesn't want it here, and the people don't want it here. And before God I swear to you, I'm going to make it as hard as possible for you to put this abortion in place.

Forgive the bad temper of my words, although it is justified. I will get over the bad temper. I will not get over my position. Rely on it.

Sincerely,

Christine Carraher
7628 Robin Road
Twentynine Palms, CA 92277
(619) 361-0505

DOCUMENT S-38
CHRISTINE CARRAHER
RESPONSE TO COMMENTS

Response S-38-1

1. This letter expresses similar concerns and issues raised by the commenter on the Draft EIR/EIS. Please refer to Chapter 2.0 of this Final EIR/EIS, Document 69 (Responses 1-22) for responses to these comments on the Draft EIR/EIS. These responses also address the issues summarized in this letter regarding the Supplement.

S-39

BY
RECEIVED

February 16, 1994

San Bernardino County Planning Commission
385 N. Arrowhead Ave. 3rd Floor
San Bernardino, Ca. 92415-0182

Gentlemen: Atten. Randy Scott

I object to the Bolo Solid Wasted Dump being brought to this community. The garbage element would draw rats and other animals. There would be flies and other pests. It would pollute the air which is one of our valuable qualities here on the desert. Environmental Organizations have fought hard to keep the desert a healthy and desirable place to live. Amboy Road is in no condition to hold up under increased traffic. I moved there and built a home in 1955 and it has been a pleaant and healthy place to live ①

Over the years many people have benefited from the clean environment and pure air.

Sincerely

Arlene Lucas

Arlene Lucas
P.O.Box 1707
29 Palms, Ca. 92277

DOCUMENT S-39
ARLENE LUCAS
RESPONSE TO COMMENTS

Response S-39-1

1. The commenter's opposition to the proposed action is noted.

2. The concerns raised by the comment regarding vectors (including rats and other animals, and flies and other pests) were addressed in Section 5.8.1.1.5 of the Draft EIR/EIS. The concerns raised by the comment regarding air quality were addressed in Section 5.7 of the Draft EIR/EIS and Section 5.4 of the Supplement.

3. Regarding the concerns raised about the condition of Amboy Road, Section 5.15 of the Draft EIR/EIS indicated that roadways would be affected by employee and nonemployee traffic based on the number of new employees that move into the area in response to the proposed action. As discussed in the Draft EIR/EIS, it is estimated that the number of employees that may use Amboy Road to commute to the site from the Morongo Basin would be about 130 for project construction and 100 for operations. At an estimated 1.2 employees per vehicle, this would result in additional employee traffic of approximately 110 vehicles for project construction and 85 vehicles for operations.

4. Amboy Road has a capacity of about 12,000 vehicles per day. With an average daily traffic volume of 630 vehicles, Amboy Road is currently operating at a LOS of A (i.e., A being best, F being worst). The increase in traffic volume to 740 vehicles per day due to the proposed action would not result in a reduction of the LOS on Amboy Road and, therefore, would not have a significant effect. No requirements to upgrade the roadway are expected due to the proposed action. Maintenance of Amboy Road is a County responsibility and, assuming that most of the traffic between the Morongo Basin and the site consists of personal vehicles, there would not be additional maintenance requirements.

S-40

P.O. Box 249
Twentynine Palms, Ca. 92277
18 February 1994

Bureau of Land Management
California Desert District
6221 Box Springs Blvd.
Riverside, Ca. 92507-0714
Attn: Mr. Randy Scott

County of San Bernardino
Planning Department
385 N. Arrowhead Ave. 3rd Floor
San Bernardino, Ca. 92415-0182
Attn: Mr. Doug Romoli

Dear Mr. Scott:

Dear Mr. Romoli:

This letter serves to present my major concerns about the proposed Bolo Landfill EIR/EIS Draft Supplement.

I live in Twentynine Palms which enjoys the best air quality in the area although it too, is not completely pollution free. Twentynine Palms is in a arid area and those of us who choose to live here are especially aware of the need to conserve water and keep it free of contamination as well.

1. At present the experts know little about possible water migration. Any water leakage from Bolo would undoubtedly affect Bristol dry lake whose underground acquifer is largely untapped and has relatively good water. ①

2. The Cadiz agricultural company could also be affected by any contamination of the water and any insect and rodent population drawn to the site. This is a business using the land and water for a productive, organic enterprise, not a destructive one. ②

3. The Supplement Draft states that the project would result in significant, unavoidable adverse NOx emissions increases in the Southeast Desert Air Basin. NOx is major component of ozone, a major pollutant, The proposed landfill is upwind of the Morongo Basin and air migrates in part to the Morongo Basin and would degrade our excellent air quality as well as air quality in other locations. ③

4. In spite of all the technical exports assurances to the public that the plastic liners will not leak, we have never had them used on such a scale and with such pressure. Liners have seams which usually give over time and could leach contaminated liquid into the ground. Also, unless the trash mounds are absolutely impervious to rodents, who, in my experience, can chew through heavy plastic, it is likely liners would be penetrated. How does the company propose to control holes under tons of trash or on the sides of liners? ④

5. The company which is proposing this mega project has one of the worst environmental records in the country and through the years has paid millions of dollars in fines to settle suits. Also, it is a private company and under federal law, it could accept trash from anywhere in the world in such a site. ⑤

6. The desert is a fragile ecosystem to be protected, not desecrated. Once such a mega dump is established, the Bureau of Land Management and San Bernardino county cannot restore the ecosystem when problems arise. Desert areas are most unforgiving!

S-40

I suggest that persons who must approve land swaps and permits, etc. note that after the recent earthquake in the Los Angeles basin seismologists are rethinking current statements about fault zones; and architects, engineers and city planners are taking another look at building codes and safety measures of all kinds.

I believe it is presumptuous to plan for a landfill to be used for the next 60-100 years, well into the 21st century, before a thorough exploration of all other alternatives. Also, pumping water at 1400 gallons a minute for a projected 90 days of construction and 100 gallons per minute, on the average, for the remaining duration of active life of the landfill (p. 5.2-6) is throwing away our most precious desert resource of the future.

I URGE that the NO ACTION Alternative listed on p. 5.4-1 be taken at this time. This Alternative would allow for more thorough research of all technologies including but not limited to pilot programs on a small scale in those counties which generate the greatest amount of waste. Only after examining tried and tested possibilities will we be able to make truly informed decisions on a real solution for the next hundred years.

Sincerely,

Esther L. Herbert

Esther L. Herbert

DOCUMENT S-40
ESTHER L. HERBERT
RESPONSE TO COMMENTS

Response S-40-1

1. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the landfill liner system proposed by Rail•Cycle has been designed to protect underlying ground water from contamination. The proposed action includes a double-composite liner system, leachate collection system, horizontal and vertical gas collection system wells, and a UZM system for early detection should the remote possibility of a gas or liquid release occur from the landfill. The proposed liner system exceeds the requirements of Subtitle D and CCR Title 23.

2. A detailed analysis of the evaluation of the Rail•Cycle-proposed liner system has been conducted by Rust Environment and Infrastructure (Rust, 1993a). Also included in the Rust report is an engineering estimate of liner leakage which was performed for Rail•Cycle by J. E. Fluet, Jr., a nationally recognized expert in geosynthetic lining systems. Applying conservative assumptions to the most recently developed analytical methodology for estimating leakage through liner systems, Fluet concluded that "there is a significant probability (95 percent) that the Rail•Cycle design will have zero leakage into the ground." He estimated potential leakage rates, assuming holes in the primary and secondary liners were aligned at 0.003 to 0.6 gallons acre/year depending on the hydraulic head assumed to be imposed on the primary leachate collection system.

3. The ground water monitoring system and the UZM system would assure early detection of any such release. In accordance with Subtitle D and CCR Title 23, should a release occur, Rail•Cycle would be required to implement an appropriate corrective action plan in consultation with the RWQCB to protect ground water quality within the Bristol Basin.

Response S-40-2

1. As shown in Figure 4.2.1 of the Supplement, ground water movement beneath the site is south toward the Bristol Dry Lake bed and would not travel from the landfill site toward the CLC agricultural lands that are located approximately two to three miles east of the site. The wells that provide water for CLC are also located approximately five miles east of the proposed site. Therefore, it would not be possible for a release from the landfill to affect the agricultural operation. Section 5.2 of the Supplement further details the potential for ground water travel of a liquid or gas in the remote possibility of a release, and also provides supplemental ground water protection mitigation measures.

2. Regarding the potential of the landfill introducing inserts and other vectors to the area that could effect CLC, a report has been prepared addressing the potential for disease vectors to be attracted to agricultural crops in the vicinity of the proposed landfill. The report, *Agricultural Impact Report - The Potential Impact on Local Agriculture From the Proposed Rail•Cycle Bolo Station Landfill,* was prepared by Edwin Barnes, Ph.D., and summarizes experiences reported by researchers at Cal Poly (Barnes, 1993). The report addresses the potential for insect/nuisance vectors to be introduced into agricultural zones and referenced the following agricultural operations conducted in proximity to currently operating landfills:

   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile of the 2,800 ton per day County of Los Angeles Spadra Landfill.
   - Privately owned and operated orchards situated in proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

3. The following discussion highlights the findings of the above report:

   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported health or safety impacts.
   - Negative effects, attributable to landfill operations on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Unpaved internal roads within the Cal Poly campus farm are responsible for more fugitive dust-related impacts on agricultural operations than fugitive dust emitted form the Spadra Landfill.
   - Citrus trees located three-tenths of a mile from the Highgrove Landfill do not exhibit more dust or dirt than trees one mile away and in the middle of the orchards.
   - The Riverside County Agricultural Commissioner's Office has not recorded

evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

4. The following mitigation measures are recommended in the report to minimize potential agricultural impacts:
   - Implementation of fugitive dust control measures, including watering, use of dust abatement products, construction of berms, speed limit controls, and curtailing operations during occasional high winds. This mitigation measure is already included in the Draft EIR/EIS for the proposed Bolo Station Landfill.
   - Installation of a pole and wire system or some other effective alternative for control of birds. This mitigation measure has been included in the Draft EIR/EIS for the proposed Bolo Station Landfill.
   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

5. Based on the above findings and mitigation measures, CLC's agricultural operations are not expected to be affected by development and operation of the proposed landfill.

Response S-40-3

1. As noted in this comment, Section 5.4 of the Supplement acknowledges that the proposed project would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, is not consistent with those parts of the MDAQMD Air Quality Attainment Plan related to emission reductions for ozone precursors. The MDAQMD has reviewed and submitted comment on the Supplement, and have concurred with the primary finding of the air quality analysis (MDAQMD, 1994).

2. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response S-40-4

1. As noted in this comment, landfill liners may leak. Based on an exhaustive study of various aspects of liner leakage, two of the foremost authorities on liners conclude that "all liners leak" (Giroud and Bonaparte, 1989). However, the authors clearly make a distinction between liners and liner systems, and further, state that based on empirical data, the realistic frequency of holes in geomembranes is one hole per acre. They note that: "Since no liner is impermeable, leakage control cannot result only from liners. Leakage control, however, can result from a combination of liners and drainage layers, performing complementary functions." The text makes it clear that it is inaccurate to conclude that liner systems cannot prevent water quality degradation.

2. As detailed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.4.1 of the Supplement, the proposed Bolo Station Landfill liner is a double-composite liner system and includes a UZM system to provide 100 percent monitoring of the vadose zone beneath the liner.

3. As described in Section 5.8.1.1.5 of the Draft EIR/EIS, vector control (including control for small rodents) would be implemented at the landfill and are required by CCR Title 14. Frequent inspection would be conducted for vector activity and an eradication program implemented, if necessary. Moreover, subsequent to the initial waste fill and daily cover, the liner system would be at substantial depth and unlikely to be accessible to rodents.

Response S-40-5

1. The environmental record of a project proponent may be considered by the decision makers during their evaluation of an EIR/EIS.

2. There is a regulatory framework in place that will assure the proposed landfill is designed, operated, and closed in accordance with applicable state and federal regulations. The proposed action will be required to attain a number of permits including, but not limited to, a CUP, WDRs, SWFP, and air quality permits. In addition to specific

requirements of state and federal regulations included in these permits, the permitting agencies may incorporate various conditions regarding the design and operation of the landfill. The combined regulatory requirements and specific permit conditions become the enforceable requirements for the proposed action.

3. In addition to the proposed action complying with specific permits, the County will adopt a Mitigation Monitoring and Compliance Program for the proposed action in accordance with Section 21081.6 of the California Public Resources Code. This program will assure that the mitigation measures included in the EIR/EIS are implemented.

4. Regarding the issue concerning accepting waste from "anywhere", it is assumed that this comment is referring to the Supreme Court case, *Fort Gratiot Sanitary Landfill, Inc. V. Michigan Department of Natural Resources*. In this case, the Court reaffirmed a previous decision that solid waste is an article of commerce and is subject to the Commerce Clause of the U.S. Constitution. The Court struck down the 1988 amendments to the Michigan Solid Waste Management Act which prohibited a site from disposing of out-of-county wastes unless such disposal had been explicitly authorized by the county in its Solid Waste Management Plan. The Court also found that there was "no valid health and safety reason for limiting the amount of waste that a landfill operator may accept from outside the State, but not the amount that the operator may accept from inside the State."

5. The proposed Bolo Station Landfill, as well as other landfills in the County, could potentially accept out-of-state wastes. It is highly unlikely, given economic and environmental constraints on municipal solid waste landfills in California, that municipal waste from other countries would be disposed at this site.

1348 Isabelle Ave.
Mountain View, CA 94040

February 19, 1994

County of San Bernardino
Planning Department
385 North Arrowhead, 3rd Floor
San Bernardino, CA 91425-0182
ATTN: Mr. Randy Scott

The following are comments based on my review of the DEIR/S and SDEIR/S for the Rail•Cycle - Bolo Station landfill proposal.

The SDEIR/S states (p. 1-7) that its intended purpose is revision and/or clarification of key issues that were the focus of comments received on the DEIR/S, and that the "...information in this Supplement is to be used in conjunction with the information included in the Draft EIR/EIS." Therefore, my comments are based on review of both of these documents.

My examination of the DEIR/S and SDEIR/S has revealed deficiencies in the following matters:

- Inadequate assessment of alternatives
- Inadequate assessment of the potential for wind erosion, with consequences for cell cap stability and air quality in Wilderness Study Areas
- Inadequate assessment of achieving cell cap stability by revegetation
- Inadequate assessment of potential impacts on ground water recharge and contamination
- No assessment is given of potential surface impacts by off-road travel when litter is retrieved that has been distributed by wind over areas not accessible by roads
- Debris flows in Chambless Wash may pose an erosional threat to the landfill
- Inadequate assessment of seismic and faulting hazards
- Incomplete consideration of the equity of the proposed land exchange

Assessment of Alternatives

CFR 40 Chap. V 1502.14(a) requires rigorous exploration and objective evaluation of all reasonable alternatives, with the purpose of avoiding or minimizing the adverse effects of these activities on the quality of the human environment (CFR 40 Chap. V 1500.2(e). The approach taken here to eliminate Eagle Mto., Mesquite Mine, and Niland sites as alternatives solely on the grounds that the Rail•Cycle - Bolo Station proponents do not have first access to them does not constitute rigorous analysis from a public point of view. [The Niland site is included because the enigmatic reason of "infeasibility of acquisition" appears to imply it is not available to the proponents]. The identification of alternatives should serve the purposes of planning to meet public needs and be independent of land ownership. The only purpose of alternative assessment is to ensure a choice or choices that minimize or eliminate adverse impacts. Pursuit of the approach applied in the DEIR/S and SDEIR/S is, by default, site selection based on a first-come first-served basis until the market is saturated rather than the requirements of NEPA (and I presume also CEQA). If Eagle Mtn., Mesquite Mine, and Rail•Cycle all were approved for operation, their combined capacity, along with the reductions mandated by AB 939, would accomodate approximately 170% (neglecting projected per capita increases and ①

potential increased permitted capacities of existing dumps) of the principal southern California waste producing counties' waste for 65 to 100 years. Well within this time span, other alternatives that avoid using undeveloped land, thereby greatly reducing adverse impacts on the human environment, are likely to become available. For example, the Mesquite Mine site is not the mine site proper, but near it (we are not even told exactly where), whereas the mine proper looks like an attractive future target as it will not be backfilled. The Boron site (again, we are not told exactly where that site is), since it is excluded as an alternative on the basis of encompassing Class I tortoise habitat, is clearly not the borax mine itself; this giant hole in the ground is not only closer to the waste producers than Rail•Cycle - Bolo Station, it may be more profitable as a landfill than for marginal mining in the not distant future. Use of already severely impacted land provides a much better alternative than use of undeveloped land as proposed by Rail•Cycle - Bolo Station, and is practiced widely in Europe. ① CONT.

Potential for Wind Erosion and Cell Cap Stability

A significant potential for wind erosion is evident from the existence of dune sands at the site and observations on windy days when dust plumes rise thousands of feet high from the bed of Bristol Lake. Dust devils may lead to important erosion and lofting.

The DEIR/S (p. 3-31) indicates that 24-hr operations will not begin until 3 years after opening of the site. In the initial 3 year period, a 6-inch thickness of "daily soil cover" will be spread over the working face for "protection" (presumably from wind action that would create a litter problem?); after 24-hr operations begin, advancing layers of waste "will be covered periodically" during the day with daily soil cover. Fill areas that will receive no additional waste for 180 days (or other specified period) will be covered, top and side slopes, with a 1-foot thickness of "intermediate soil cover." Alternative synthetic covers for both daily and intermediate covers are being considered. In the event that "soil" cover is used, it is necessary to fully characterize the materials to be used, especially in terms of grain-size distributions, and assess potential wind-erosion yields and effects of components that are transportable in saltation and suspension modes.

Final cover (SDEIR/S , p. 3-11) is to consist of an unidentified 2-foot thick "foundation" layer, overlain by a 1.5-foot thick (increased by 0.5 feet over that described in the DEIR/S) of clay compacted to a permeability $\leq 1X10^{-7}$ cm/sec, capped by 2-3 feet of "topsoil" (increased by 1-2 feet over that described in the DEIR/S). All three layers need to be fully characterized, especially in terms of grain-size distributions, and analyzed for potential wind-erosion yields and effects of components that are transportable in saltation and suspension. ②

The clay layer of the final cover is described in the DEIR/S (p. 3-33) as representing "...not only the 'standard' regulatory method but also the 'worst-case' in terms of associated environmental impacts." If so, why was its thickness increased 50% in the SDEIR/S? Does this indicate that "worst-case" is poorly defined? The clay layer is important in two respects: if exposed it is vulnerable to wind erosion (by impact of wind-driven sand (Gillette, 1974; Gillette and others, 1980; Gomes and others, 1990), and will yield a very large percentage of its components to long-distance transportation in the suspended load. Secondly, a dominant component of the local plant community is creosote (*Larrea tridentata*), which has high oxygen requirements for root growth (Lunt and others, 1973) and is thus precluded from fine-textured, poorly drained soils. Can it be demonstrated that the additional "topsoil" cover of 2-3 feet thickness is adequate to permit growth of creosote, which represents an important element in surface stability as well as habitat? If alternative synthetic cover is used instead of the clay layer, its behavior with exposure to sandblasting and root penetration also needs to be demonstrated.

The long period of time that will likely be required for revegetation in the very dry climate of Bolo Station (50 to 100 yrs estimated by the DEIR/S, p. 5.5-1) presents major ③ problems that were not adequately addressed. A number of other currently active projects in the desert, such as the Viceroy gold mine, have recognized that the reseeding approach specified in the DEIR/S (p. 5.5-2) will not likely succeed and have adopted other approaches. Experiments in revegetation of desert communities have also been on-going for some time at Joshua Tree National Monument. These parties should be consulted. The problems that are likely to arise even with a more adequate revegetation plan include erosion of the cap materials before sufficient plant cover is established. With the anticipated typical cell filling time of 1-2 yrs (DEIR/S, p. 3-25), erosion, both by wind and water, can be anticipated through completion of filling of a number of cells (see Fig. 3.5, DEIR/S). Wind erosion is likely to produce sandblasting impacts on adjacent downwind cells, exacerbating the problem of dust yield as well as threatening successful revegetation of the downwind cells. The potential impacts of readily mobilized sand represented by the mapped dune deposits (DEIR/S, Fig. 4.2.5) in sections 17, 18, 20, and 21 was not assessed. ③ CONT.

According to Fig. 4.7.3 (DEIR/S) dominant wind directions and highest wind speed class are from the WNW and ESE, which would represent the directions of greatest impact from PM_{10} ($\leq$ 10 micron aerodynamic diameter) emissions on air quality. The Old Woman Mountains Wilderness Study Area is 28 miles SE of Bolo Station, and the Turtle Mountains Wilderness Study Area is 47 miles SE. Both of these areas are designated Wilderness by the pending Desert Protection legislation. ④

As indicated by the DEIR/S (p. 1-9; 5.7-23) and SDEIR/S (p. 1-7), the Southeastern Desert Air Basin (SEDAB) is currently nonattainment for PM_{10} emissions, and additional such emissions represent an unmitigable adverse impact. We anticipate that full characterization of earth materials to be used as final capping materials and analysis of their mobilization by such models as described by Westphal and others, 1987) will likely show that the mitigations proposed will not significantly reduce the problem for at least the lifetime of the project (60-100 yrs), and that the project's contribution to deterioration of air quality in SEDAB will be substantially worse than predicted. ⑤

Ground Water Recharge and Contamination

The assessment of potential preferred pathways for rapid transport of contaminants into the groundwater focused on attempting to detect buried gravel channel-fill deposits. The (SDEIR/S, p. 4.1-7) assumed that any channels situated above the water table were of no importance because "they would not provide a groundwater migration pathway." Considering the estimated annual onsite water consumption of 130 acre feet (SDEIR/S, p. 3-11), which represents a major increase over that estimated in the DEIR/S, combined with other nearby ground water mining for brines, the possibility for inducing either desiccation or subsidence fracturing should be considered. Such fractures could act as preferred pathways and/or connect gravel channels to the water table. ⑥

The north-south orientation of trenches T-1, T-2, and T-3 (SDEIR/S, Fig. 4.1.1) seems inappropriately chosen to test for buried channels, which are likely to run south down the topographic slope. ⑦

The assessment of the presence of buried channels omitted the debris flow deposits in Chambless Wash. These are gravelly to bouldery (Jacobs Engineering Group, 1991, p. 4-17) and may be surface reflections of complex channel deposits. ⑧

Potential Off-road Travel Impacts of Litter Control

Most desert dumps, even small fenced ones, yield a lot of paper and plastic litter that can be carried large distances during high winds or during ordinary weather by dust devils. The DEIR/S (p. 3-45) states that this problem will be mitigated by a litter control team that will "police surrounding areas, including adjoining properties." Especially in the direction that prevailing westerlies would carry litter, there is much open, roadless land. If these areas are to be policed by use of off-road vehicles, it is necessary to assess the consequent impacts (see Webb and Wilshire, 1983). ⑨

Debris-flow Hazards

Jacobs Engineering Group Inc. (1991, p. 4-34) recognized the possibility that future flash floods down Chambless Wash could erode the landfill. Debris flows in this locality have clearly occurred in the recent past. How are these to be mitigated? ⑩

Seismic and Fault Hazards

Lessons from the Landers earthquake caution that significant earthquakes are possible in the Mojave Desert even where fault activity had not previously been recognized. Estimations made of hazards from earthquakes and fault rupture in the site documents should be more conservative.

The Bristol Mountains fault (south Bristol Mountains fault of Howard and Miller, 1992) is stated to be 14 km northwest of the site by the SDEIR/S and either 23 km or 10 km from the site by Jacobs Engineering Group Inc. (1991). Yet the fault zone was shown as 7 km from the site by Miller et al. (1982) and 6 km from the site by Howard and Miller (1992). Both Miller et al. (1982) and Howard and Miller (1992) map the fault as projecting toward the site, and they describe the fault as cutting Pleistocene deposits. It therefore fits the California definition of a potentially active fault. ⑪

Lineaments 30-km long striking northwest across Bristol Lake were identified by Kupfer and Bassett (1962) and Sugiura and Sabins (1980) as cutting Holocene deposits. Jacobs Engineering Group Inc. (1991, p. 5-17) mentioned the lineaments but without further work dismissed them as probably not active faults, and they were ignored in the DEIR/S and SDEIR/S. The possibility that these features are active faults has yet to be thoroughly assessed. ⑫

A north-striking feature called lineament A by Jacobs Engineering Group Inc. (1991) projects toward the border of the site, and was recommended for trenching. The SDEIR/S describes a program of subsequent geophysics and trenching to test the possibility that lineament A projects into the site as a fault. The north-south orientation of the short trenches, indicated in SDEIR/S Figure 4.1.1, makes them unlikely to intersect the lineament. East-west trenching across the lineament would have been more information. It remains to be demonstrated that the lineament is not a Holocene rupture on which future movements could disrupt the site and be accompanied by seismicity. ⑬

Equity of Proposed Land Exchange

It is proposed that 2.5 sections of land under the jurisdiction of BLM needed for the project be exchanged for 3 sections privately owned by ATSF. What amounts to essentially an acre-for-acre exchange does not take into account long-term to permanent environmental degradation of vastly larger areas of public land. Huge areas, especially to the east-south-east will have long-term reduced air quality. These include lands presently under consideration for wilderness status (S 21). The end product of the project, a hill rising to 380 feet above the present land surface and covering 2,100 acres, will constitute a permanent visual intrusion on the landscape affecting especially a large area to the south of the site. And, additional overdraft of ground water will adversely affect public resources over a large area of the Bristol basin. I believe that the bases for land exchange need to be reevaluated. ⑭

References

Gillette, D.A., 1974, On the production of soil wind erosion aerosols having the potential for long-range transport: Journal de Recherche Atmospherique, v. 8, p. 735-744.

Gillette, D.A., Adams, J., Endo, A., Smith, D., and Kihl, R., 1980, Threshold velocities for input of soil particles into the air by desert soils: Journal of Geophysical Research, v. 85, p. 5621-5630.

S-41

Gomes, L., Bergametti, G., Coude-Gaussen, G., and Rognon, P., 1990, Submicron desert dusts: A sandblasting process: Journal of Geophysical Research, v. 95, p. 13,927-13,935.

Howard, K.A. and Miller, D.M., 1992, Late Cenozoic faulting at the boundary between the Mojave and Sonoran blocks: Bristol Lake area, California, *in* Richard, S.M. (ed.), Deformation associated with the Neogene Eastern California Shear Zone, southeastern California and southwestern Arizona: Redlands, California, San Bernardino County Museums Special Publication 92-1, p. 37-47.

Jacobs Engineering Group Inc., 1991, Phase II - Geologic, hydrogeologic and geotechnical site characterization study, Bolo Station facilities, San Bernardino County: Pasadena, California, Pasadena Environmental Programs, December, 1991, 10 chapters.

Kupfer, D.H. and Bassett, A.M., 1962. Geologic reconnaissance map of part of the southeastern Mojave Desert, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-205, scale 1:125,000.

Lunt, O.R., Letey, J., and Clark, S.B., 1973, Oxygen requirements for root growth in three species of desert shrubs: Ecology, v. 54, p. 1,356-1,362.

Miller, D.M., Howard, K.A., and John, B.E., 1982, Preliminary geology of the Bristol Lake region, Mojave Desert, California, *in* Cooper, J.D. (compiler), Geologic excursions in the Mojave Desert, Geological Society of America 78th Annual Meeting, Cordilleran Section, Guidebook for trips No. 2, 7, and 13, p. 91-100.

Sugiura, Ray and Sabins, Floyd, 1980, The evaluation of 3-cm-wavelength radar for mapping surface deposits in the Bristol Lake/Granite Mountain area, Mojave Desert, California, *in* Radar geology, An assessment: Report of the Radar Geology Workshop, Snowmass, Colorado, July 16-20, 1979: Pasadena, California Jet Propulsion Laboratory, National Aeronautics and Space Administration, p. 439-456.

Webb, R.H. and Wilshire, H.G. (eds.), 1983, Environmental effects of off-road vehicles: New York, Springer-Verlag, 534 p.

Westphal, D.L., Toon, O.B., and Carlson, T.N., 1987, A two-dimensional numerical investigation of the dynamics and microphysics of Saharan dust storms: Journal of Geophysical Research, v. 92, p. 3,027-3,049.

Sincerely,

Howard G. Wilshire

Dr. Howard G. Wilshire

DOCUMENT S-41
HOWARD G. WILSHIRE
RESPONSE TO COMMENTS

Response S-41-1

1. Alternative sites are considered more feasible for public projects than for private projects. However, reasonable alternatives to the project location for a private project must be discussed when appropriate. CEQA recognizes that alternative sites are feasible when either the project proponent owns or controls the alternative, or has the ability to purchase or lease the other sites. Section 3.3 of the Supplement identifies the reasons why this is not the case with the Eagle Mountain, Mesquite Mine and Niland sites. Further, as defined by CEQA, alternatives are defined not only for their potential to reduce or eliminate environmental impacts, but also for their ability to meet the basic objectives of the project.

2. The precise methodology and assumptions used to estimate that the three proposed rail-haul landfill projects (Rail•Cycle, Mesquite, and Eagle Mountain) would accommodate approximately 170 percent of southern California's waste for 65 to 100 years, as referenced in this comment, is unknown. As discussed in Chapter 2.0 of the Supplement, the anticipated short-fall in landfill capacity projected for southern California indicates that one or more large regional landfills may be required.

3. As noted in this comment, it is possible, if not likely, that environmentally superior waste disposal alternatives will become available within the projected life span of the proposed action. These alternatives, however, are speculative and beyond the realm of alternatives which can reasonably be evaluated in an EIR/EIS. Approval of any of the desert landfill projects does not preclude implementation of environmentally superior alternatives in the future.

Response S-41-2

1. The analysis requested by the comments regarding fugitive dust and wind erosion of the soils used as cover material (i.e., daily, intermediate and final cover) at the proposed landfill was conducted as part of the AQIA for the proposed project (Jacobs, 1992). The impact of the proposed project on PM_{10} levels in the SEDAB that are addressed in Section 5.7 of the Draft EIR/EIS are based on the AQIA. The EPA emissions calculation methodology used to estimate PM_{10} takes into account particle size distribution and suspension. Grain size distributions are assumed for the modeling based on well-known values for soil materials to be used as daily, intermediate and final cover at the proposed landfill.

2. Regarding the thickness of the clay layer in the final cover, at the time the Draft EIR/EIS was distributed, CCR Title 23 required a 1-foot thick layer of clay in the final cover. Prior to distribution of the Supplement, California adopted the Subtitle D requirements that include a 18-inch thick clay layer in the final cover. Contrary to the suggestion made by this comment, this change does not represent a "poorly defined" worst-case assumption for the EIR/EIS, but was adopted to comply with revised state regulations.

3. As discussed in Section 3.2.7 of the Supplement, based on consultation with botanists from NPS's-Joshua Tree National Monument Center for Arid Land Restoration, restoration of native desert plant species has been shown to be effective. The increase in the topsoil depth of 2 to 3 feet thick was based on NPS's recommendation that this depth would be adequate for creosote.

4. As discussed in Section 3.3.2.1.4 of the Draft EIR/EIS and Section 3.2.7 of the Supplement, the use of a flexible membrane liner in the final cover of the proposed landfill is a permitting issue that would be considered by the CIWMB and RWQCB. Prior to approving the use of such an alternative final cover, these agencies would consider various issues associated with the use of the alternative final cover including, as appropriate, the issues raised by this comment. The issue of suitability of the alternative final cover is a permitting issue and not an EIR/EIS issue.

Response S-41-3

1. As discussed in Response S-41-2, the topsoil layer over the final cover of the landfill was increased to 2 to 3 feet from 1 foot described in the Draft EIR/EIS. This change was made after consultation with NPS's - Joshua Tree National Monument Center for Arid Land Restoration and was described in Section 3.2.7 of the Supplement.

2. A mitigation measure has been included in this Final EIR/EIS (see Table S.2) that requires Rail•Cycle to develop a detailed revegetation plan for the proposed landfill in consultation with NPS's - Joshua Tree National Monument. This mitigation measure includes a requirement that

Rail•Cycle establish a nursery at Bolo Station for germination and growth of native shrubs.

3. The commenters' remarks concerning "sandblasting" of adjacent downwind cells is speculative and no information is provided to support the remarks. Neither CEQA or NEPA require an EIR/EIS to address speculative issues.

Response S-41-4

1. The Draft EIR/EIS, Supplement, and this Final EIR/EIS acknowledge that the Bolo Station site is located in a nonattainment air basin (i.e., SEDAB) and would result in significant, unavoidable, adverse air quality impacts.

2. The project-specific air quality impacts to the proposed wilderness areas referenced in this comment (i.e., Old Woman Mountain WSA and Turtle Mountains WSA) would be attenuated by distance and intervening topography. Moreover, the specific language in the California Desert Protection Act states that: "The Congress does not intend for the designation of Wilderness Areas in . . . this Act to lead to the creation of protective perimeters or buffer zones around any such Wilderness Area."

3. The designation of the wilderness areas, therefore, is not interpreted to preclude surrounding development. Several other existing and proposed land uses located between the Bolo Station site and the proposed wilderness areas would also contribute to air quality impacts to the proposed wilderness areas (i.e., the proposed CLC agricultural operation expansion).

Response S-41-5

1. As discussed in Response S-41-2, the AQIA for the proposed project included fugitive dust and wind erosion from the cover materials that would be used at the proposed landfill.

2. The MDAQMD has reviewed and submitted comment on the Draft EIR/EIS, and has concurred with the finding of the air quality analysis (MDAQMD, 1994). As noted in Section 5.4 of the Supplement, the proposed action would have a significant air quality impact on the SEDAB after mitigation. The project, therefore, would not be consistent with those parts of the MDAQMDs Air Quality Attainment Plan related to attainment of PM_{10} standards.

3. As noted in Chapter 2.0 of this Final EIR/EIS, Document 003, Response 6, the estimate of combined NO_X and ROG project emissions at full development in the year 2010 is 1.7 tons/day, representing an increase in the current planning inventory baseline of 0.6 percent. To the extent that these emissions are not offset or mitigated in attainment plans adopted by the MDAQMD, these emissions could delay attainment of ozone standards.

4. Prior to the installation of the first stationary air emission source (i.e., expected to be a landfill gas flare approximately two to three years after the landfill begins accepting waste), a New Source Review would be required under MDAQMD Regulation XIII. Rail•Cycle would be required to offset the emissions of ozone precursor pollutants. Therefore, while for purposes of the EIR/EIS, air quality impacts are considered to be unavoidable and adverse, through the permitting and emission offset requirements of MDAQMD's Regulation XIII, the proposed project would be required to demonstrate conformance with MDAQMD's Air Quality Attainment Plan.

Response S-41-6

1. It is unlikely that ground water pumping for onsite use would result in subsidence or desiccation that could create significant ground water pathways. As discussed in Section 5.1.1.2.2 of the Supplement, onsite water pumping is not anticipated to result in ground settlement within the landfill footprint. Based on the ground water modeling, an onsite well in Section 9 would result in less than 3 feet of drawdown beneath the landfill over the project duration (100 years) (Rust, 1993). The current proposal is to relocate the wells to the southeast corner of Section 33, which is more than two miles from the landfill footprint.

2. Such fractures, if created, would be unlikely to provide ground water flows across the site. As concluded in Sections 4.1 and 5.1 of the Supplement, the geophysical surveys and exploration provided no evidence of buried gravel channels which could serve as preferential ground water pathways. Even if fractures related to ground water pumping were able to provide pathways to buried channels, they would not represent a significant pathway for a potential release from the landfill. Such a release would be captured and removed by the proposed UZM layer (i.e., 4-inch permeable layer) of the double-composite liner, instead of migrating to a lower pathway.

Response S-41-7

1, Figure 4.1.1 of the Supplement only depicts the location of the trenches, and not the orientation. The trenches were excavated in an east-west direction which was optimal to identify features with a north-south orientation as noted in this comment.

Response S-41-8

1. Segment "B" of the geophysical survey, as shown in Figure 4.1.1 of the Supplement, traverses a portion of the Chambless Wash which is proximate to the landfill. The wash crosses diagonally through Section 22 on the east side of the proposed landfill. Segment "B" crosses the western portion of Section 22 in a northwest/southeast direction which was aligned to traverse possible buried channels that may trend north to south. Shallow electromagnetic and very low frequency resistivity surveys were conducted along this segment to detect the channels. The geophysical survey and exploration programs were agreed to in concept by representatives of the RWQCB and SWRCB (Jacobs, 1993b).

2. As recommended by the SWRCB geologist and County Geologist, a mitigation measure that landfill cell excavations be logged under direction of a Certified Engineering Geologist has been included in this Final EIR/EIS (see Table S.2). The review of this logging would reveal any data gaps from preliminary investigations including the potential presence of buried channel deposits in the vicinity of Chambless Wash.

Response S-41-9

1. Section 3.3.2.1.4 of the Draft EIR/EIS described litter control measures for the proposed landfill. The plan would address personnel, fencing, equipment, and special procedures, such as those required during periods of high velocity winds (i.e., reducing the size of the working face). As mentioned in this comment, a litter control team is proposed to monitor the landfill and surrounding areas. The litter control measures proposed by Rail•Cycle are designed to contain the waste to an area that is much smaller than the entire site. Therefore, the litter control team would be limited to access roads and is not expected to travel offsite.

2. An important point to note is that by primarily accepting post-recycled waste or waste that has been processed through an MRF, a significant portion of the primary source of litter at most landfills (i.e., paper, cardboard boxes, and plastic bags) would be removed from the waste stream and not transported to the landfill for disposal. This factor, in conjunction with the litter control measures that would be implemented at the proposed landfill, are expected to control onsite and offsite litter.

Response S-41-10

1. Landfill development would occur on a 45- to 60-acre, cell-by-cell basis throughout the life of the proposed landfill. Landfill development in the area of Chambless Wash, located in the western half of Section 22, is not projected to occur for 25 to 30 years after project startup. Consistent with requirements of the County Land Development Department, the following mitigation measure has been included in this Final EIR/EIS (see Table S.2) to mitigate the potential impacts, should high velocity flows occur in the Chambless Wash:

   - In consultation with the County Land Development Department, Rail•Cycle shall monitor and map drainage flows in the affected area of Chambless Wash. Based on this monitoring and in consultation with the County Land Development Department, protective measures, if any, would be identified prior to developing this portion of the site.

Response S-41-11

1. An extensive investigation of the potential for active faults or other geologic hazards present at the Bolo Station site included a review of available literature, including the literature cited in this comment (see Table E.1, Appendix E of this Final EIR/EIS). Based on the review, a summary table has been prepared and is included as Table E.2, Appendix E of this Final EIR/EIS. This table indicates the status of faults and potential fault zones in the site vicinity.

2. The references reviewed to develop the table do not classify the faults in the project area as active. As noted in this comment, the South Bristol Mountain Fault is described as affecting upper Pleistocene deposits; however, there is no evidence that the fault cuts Holocene deposits. The findings of the overview support the conclusions of the Draft EIR/EIS and Supplement that a Holocene fault does not occur within the site or the vicinity of the site. The overview also supports the findings of the Draft EIR/EIS and Supplement that an earthquake on the Ludlow

Fault would yield the highest peak horizontal ground acceleration during the MPE and MCE events at the site.

Response S-41-12

1. Based on the extensive literature review as described in the Response S-41-11, and the investigation of the potential for active faults as documented in Section 4.2 of the Draft EIR/EIS and Section 4.1 of the Supplement, there is no indication of active faulting at, or in the vicinity of the Bolo Station site. As discussed in Response S-41-8, as recommended by the SWRCB geologist and County Geologist, landfill cell excavations would be logged under direction of a Certified Engineering Geologist. The review of this logging would reveal any data gaps from preliminary investigations.

Response S-41-13

1. As noted in Response S-41-7, the trenches were excavated in an east-west direction which was optimal to identify features, such as Lineament A, with a north-south orientation.

2. The County Geologist has reviewed the available geologic information and conducted an onsite field reconnaissance with Rail•Cycle, Environmental Solutions, Inc., and Gary Rasmussen, Rail•Cycle's consulting geologist. The field reconnaissance is documented in a report prepared by Mr. Rasmussen (Rasmussen, 1994). Rasmussen finds that Lineament A is not related to Holocene faulting.

3. As previously discussed, geologic logging of cell walls during excavation and submittal of a geologic report shall be required pursuant to the recommendations of the SWRCB and County Geologist. Appropriate setbacks would be implemented, if necessary, should active faulting be encountered.

Response S-41-14

1. The three sections of offered lands that would be exchanged as part of the proposed action were selected by BLM primarily on the basis of their greater wildlife habitat values.

2. Significant long-term environmental degradation to surrounding lands is not anticipated due to project implementation at the Bolo Station site. The selection of the proposed site reflects, in part, a recognition of existing development in the project area and a level of existing environmental degradation. Existing developments in the project area which have impacted natural resources include:

   - Mineral production (salts) on and surrounding the Bristol Dry Lake (i.e., Cargill and National Chloride).
   - Modest development at Amboy and Chambless.
   - Transportation corridors (i.e., rail, road and pipelines).
   - Intensive agricultural operations at Cadiz (i.e., CLC).

3. It is not expected, therefore, that the proposed action would impact "vastly larger areas" of public land. Visual and air quality impacts are cumulatively impacted by existing uses in the area. Also, although as noted in this comment, proposed wilderness areas may be indirectly impacted by development of the landfill and other surrounding land uses, the proposed California Desert Protection Act (SB 21) does not intend to provide buffers for the wilderness areas. Section 105 of the proposed Act states that:

   > "The Congress does not intend for the designations of wilderness areas in Section 102 of this Act to lead to the creation of protective perimeters or buffer zones around any such wilderness area. The fact that nonwilderness activities or use can be seen or heard from areas within a wilderness shall, not of itself, preclude such activities or uses up to the boundary of the wilderness area."

4. As described in Section 5.2 of the Supplement, ground water modeling conducted for Rail•Cycle indicates that the proposed pumping of 130 acre-feet per year would not affect other ground water users in the area. However, due to the uncertainty of ground water recharge, and the proposed use of up to 30,000 acres-feet per year for CLC's expanded agricultural operations, the EIR/EIS recognizes the potential overdraft of Bristol Basin due to cumulative ground water pumping.

S-42

John Stevens
4097 Pershing Ave.
San Bernardino
California 92407
(909)882-2060

3/1/94

To; Aileen Deardorff, Senior Associate Planner
San Bernardino County Planning Department
385 North Arrowhead Avenue, 3rd Floor
San Bernardino, CA 92415-0182
(909)387-4099

I have three questions for the Environmental Review Committee (ERC) on the **Rail Cycle-Bolo Station Landfill Project.**

(1) With two train derailments in the last couple of weeks do you think Rail Cycle is safe for the People of San Bernardino? ①

(2) With Malathion Spraying (a dangerous health risk) starting up again and other questionable practices (like separtating trash in the old Santa Fe Site) don't you think that the spread of the Med-Fly and other Diseases because of this trash will have a impact on the People in the San Bernardino area? ②

(3) Is the Toxic Waste from N.A.F.T.A. being sent up from Mexico to this site? If it is what sort of Waste will it be and in what volumes. ③

The People in the San Bernardino area are sick and tired of Corporations thinking of us as a **TOXIC TOILET.**

The People of San Bernardino are also tired of the Board of Supervisors selling out to the Corporations and completely ignoring the health and safety of the People.

I would also like if these Questions could be read into the minutes and not hidden in the paperwork.

Thank-you for any help that you can give me.

John Stevens

DOCUMENT S-42
JOHN STEVENS
RESPONSE TO COMMENTS

Response S-42-1

1. While train derailments are a possibility associated with any movement of materials by rail, federal and state regulations assure maximum safety of the rail system. As discussed in Section 5.8.1.2 of the Draft EIR/EIS, rail lines and their operation are regulated by the U.S. Department of Transportation, Federal Railroad Administration, Interstate Commerce Commission and PUC. The rail lines to be used to support the proposed action are operated based on ATSF rules and regulations which meet or exceed existing federal and state regulation to provide safe operating conditions. These rules and regulations govern train operations, equipment repair and maintenance, and track repair and maintenance.

2. Train operations are run on signals and much of the track is operated by ATSF's Centralized Traffic Control, in which train movements are controlled by a central dispatcher. Each train is in radio communication with other trains as well as the dispatcher.

3. Tracks and their structures are inspected by ATSF for defects at a minimum of twice a week. Records of these inspections are maintained and indicate the nature of identified defects as well as when the defects are corrected. The tracks are also inspected by Federal Railroad Administration inspectors. Equipment is also subject to frequent inspection by ATSF and Federal Railroad Administration. Inspections include locomotive and freight car running gear, air lines, and journal (axle) bearings. For the proposed action, these inspections would normally be accomplished at ATSF's Barstow yard.

4. Accidents and track defects, should they occur, are reported to the ATSF dispatcher. The dispatcher controls the movement of successive trains in accordance with the severity and nature of the accident or defect. The train dispatcher maintains a list of supervisors, repair crews, and equipment available on a 7-day, 24-hour basis for responding to such calls. Accidents involving injuries, vehicles, and private/public property are reported, and the appropriate response coordinated with local agencies.

5. It is important to note, the solid waste to be transported by rail to the proposed Bolo Station Landfill consists only of nonhazardous, municipal solid waste. Even in the unlikely event of a derailment of a Rail•Cycle train, there is no risk to the public from the municipal waste carried by the trains.

Response S-42-2

1. This comment expresses concern regarding the potential for transporting insects (i.e., Mediterranean fruit flies) to the area. An April 1993 report by Edwin Barnes, Ph.D., entitled *Agricultural Impact Report from the Proposed Rail•Cycle Bolo Station Landfill* , summarizes experiences reported by researchers at Cal Poly (Barnes, 1993), regarding the following agricultural operations conducted in close proximity to sanitary landfills:

   - Approximately 700 acres of citrus, grapes, and other fruit trees farmed by Cal Poly within one-quarter mile to one mile from the 2,800 ton per day County of Los Angeles Spadra Landfill.
   - Privately owned and operated orchards situated in close proximity to the Highgrove Landfill (operated for approximately 35 years) in Riverside County.

2. The following discussion highlights the findings of the report:

   - Operation of the Spadra Landfill adjacent to Cal Poly since 1957 has not resulted in reported insect impacts.
   - Negative effects, attributable to landfill operations or insects attracted to the area by the landfill on crop yield, quality, fruit size, color, shape, and flavor have not been observed.
   - Riverside County Agricultural Commissioner's Office has not recorded evidence of any major insect or mite problems in the vicinity of the Highgrove Landfill since the early 1970s.

3. The following mitigation measure has been included in the Final EIR/EIS to minimize possible agricultural impacts from insects potentially transported to the site:

   - Subject to the cooperation of CLC, an insect monitoring and trapping program shall be implemented at the landfill site and CLC's agricultural areas to determine baseline insect populations. This monitoring program, which shall be conducted by a consultant

> selected jointly by Rail•Cycle and CLC, shall be continued on an annual basis after the landfill is operational to verify that insects are not being introduced to CLC's agricultural lands by waste operations.

Response S-42-3

1. This comment expresses the concern that hazardous waste from Mexico would be disposed of at the proposed landfill. The proposed landfill would be permitted to accept only nonhazardous solid waste. Hazardous waste from Mexico or any other jurisdiction, domestic or foreign, would not be accepted at the site.

CHAPTER 4.0
TERMS AND ABBREVIATIONS

4.0 TERMS AND ABBREVIATIONS

4.1 DEFINITION OF TERMS

1. The definitions below are provided as clarification for terms used in this document.

TERM	DEFINITION
Active fault	Fault with recent seismic activity as to have displaced materials not more than 11,000 years old.
Alluvium	A general term for deposits made by streams on riverbeds, flood plains, and alluvial fans. The term applies to stream deposits of recent time.
Aquifer	A body of rock that is sufficiently permeable to conduct ground water and yield economically significant quantities of water to wells and springs.
Berm	An earthen structure, generally several feet high, which acts as a barrier to make it difficult for a vehicle to cross, or which redirects the flow of traffic or water.
California Desert Conservation Area (CDCA) Plan	BLM program which provides for the proper use of desert public lands and resources, while safeguarding the environmental, cultural, and aesthetic values.
California Environmental Quality Act (CEQA)	Legislation enacted in 1970 to protect the quality of the environment for the people of California by requiring public agencies and decision makers to document and consider the environmental consequences of their actions.
Cone of depression	The depression produced in a water table or potentiometric surface by pumping.
Confining bed	A low-permeability rock or soil formation that will not readily transmit water, and retards or stops the free movement of water underground. Confining beds have also been called aquicludes, aquitards, or semiconfining beds. Few deposits are completely impermeable--most will transmit some water, though slowly; hence, aquifer and confining bed are relative terms.
Cumulative impacts	Two or more individual effects which, when considered together, are significant or compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects.
dBA	A-weighted decibel; decibel weighted to reflect sounds most sensitive to human ears.
Discharge	Rate of flow at a given instant in terms of volume per unit of time: (1) pumping discharge equals pumping rate, usually given in gallons per minute; (2) stream discharge, usually given in cubic feet per second. In ground water use, the movement of water out of an aquifer. Discharge may be natural, as from springs, seepage, or evapotranspiration, or it may be artificial, with the use of constructed drains or wells.
Discretionary actions	For the purpose of CEQA, these are actions or approvals by governmental agencies or boards that require the exercise of judgment or deliberation when making a decision to approve, deny, or approve with conditions a proposed project.

TERM	DEFINITION
Drawdown	The lowering of the water table or potentiometric surface caused by pumping (or artesian flow). Knowledge of the amount of drawdown at a given pumping rate, over a specified length of time, is necessary to estimate the probable long-term effect on the water table.
Effects	Effect and impact are synonymous as used in this report. Direct or primary impacts are those caused by the project and occur at the same time and place. Indirect, or secondary, effects are those which result from the project which occur later in time or are further removed in distance or time, but are still reasonably foreseeable.
Endangered species	An animal or plant species which is in danger of extinction throughout all or a significant portion of its range, as defined in the ESA Amendments of 1982 and the CESA of 1984.
Environment	The physical conditions which exist within the area which will be affected by a proposed project or alternative, including but not limited to land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The environment includes both natural and man-made conditions.
Environmental Impact Report (EIR)	A detailed report prepared under the CEQA describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects. An EIR is prepared for use by the public, public agencies and agency decision makers to weigh the environmental consequences of a proposed action.
Environmental Impact Statement (EIS)	An analytical document that portrays potential impacts to the human environment of a particular course of action and its possible alternatives prepared under NEPA. An EIS is prepared for use by the public, public agencies, and agency decision makers to weigh the environmental consequences of a proposed action.
Fault	A fracture or fracture zone along which there has been displacement of the sides relative to one another as a result of seismic activity.
Feasible	Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.
g	The acceleration of gravity (32.2 ft/sec^2).
Green waste compost	A mixture of decaying organic solid waste matter used as fertilizer.
Ground water	Water found beneath the land surface, in the zone of saturation below the water table.
Habitat	The place where an animal or plant normally lives, often characterized by a dominant plant and codominant form, such as creosote bush habitat.
Hazardous material	Substance which, because of its potential for either corrosivity, toxicity, ignitability, chemical reactivity, or explosiveness, may cause injury to persons or damage to property.
Hydraulic gradient	The gradient (slope) of the potentiometric surface or water table in the direction of the steepest slope, generally expressed in feet per foot or feet per mile. May also be stated as the change in static head per unit of distance in a given direction.

TERM	DEFINITION
Impermeable	Not capable of transmitting fluids or gasses in appreciable quantities.
Initial study	A preliminary analysis prepared by the lead agency to determine whether an EIR or a Negative Declaration must be prepared or to identify the significant environmental effects to be analyzed in an EIR.
Landfill condensate	Liquid from landfill gas resulting from the temperature decline of gas during collection.
Landfill cover	Low-permeability compacted soil placed over completed sections of a landfill to minimize percolation of surface water through the waste and prevent scavenging.
Landfill gas	Gas produced as part of the biological decomposition of the organic matter present in solid wastes.
Landfill liner	Layer of low-permeability soil (clay) and/or synthetic material applied to the bottom of the landfill to direct leachate to the leachate collection system and minimize leakage in cases of leachate production.
Leachate	Liquid resulting from decomposition of organic waste in a landfill which contains dissolved waste materials.
Lead agency	The public agency which has the principal responsibility for carrying out or approving a project.
Materials Recovery Facility (MRF)	A facility used to inspect and separate loads of waste for recoverable or recyclable materials generated locally.
Mitigation	A method or procedures which may: (1) avoid an impact altogether by not taking a certain action or parts of an action, (2) minimize impacts by limiting the degree or magnitude of the action and its implementation, (3) rectify the impact by repairing, rehabilitating, or restoring the impacted environment, (4) reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action, and (5) compensate for the impact by replacing or providing substitute resources or environments.
Mitigation measure	Method or procedure undertaken for the purpose of avoiding or reducing potential impact(s) of an action.
National Environmental Policy Act (NEPA)	Legislation enacted in 1969 that requires federal agencies to include in their decision-making processes: (1) appropriate consideration of all environmental effects; and (2) procedures to avoid or minimize adverse effects, and restore and enhance environmental quality as much as possible.
Notice of Preparation	A brief notice sent by the public agency with principle responsibility for carrying out or approving a project to notify other agencies that an EIR is being prepared under CEQA.
Notice of Intent	Similar to the Notice of Preparation, used to notify other agencies and the public that an EIS is being prepared under NEPA.
Over-consolidation Ratio (OCR)	The ratio of preconsolidation stress to the existing vertical overburden stress. Normally consolidated soils have an OCR = 1; over-consolidated soils have an OCR greater than 1.
Ozone (O_3)	An end product of complex reactions between ROG (or non-methane hydrocarbons) and NO_x in the presence of ultraviolet radiation.

TERM	DEFINITION
Permeability	A measure of the relative ease with which a porous medium can transmit a liquid under a potential gradient. It is a property of the medium alone and is independent of the nature of the liquid and of the force field causing movement. It is a property of the medium that is dependent upon the shape and size of the pores.
Project	The whole of an action, which has a potential for resulting in a physical change in the environment.
Prospectively valuable	Used by BLM in the CDCA Plan to define areas of potential mineral value. Identifies areas having similar geologic conditions to other areas where minerals have been extracted, the inference being that similar deposits are probably present. This determination also includes those areas where there is information that the resource is present, but information as to the extent and quality cannot be ascertained. Under both conditions there should be a reasonable expectation that the deposit will meet at least the minimum characteristics for a valuable deposit (BLM, 1980a).
Public land	Any land and interest in land owned by the United States within the several states and administered by the Secretary of the Interior through the BLM, without regard to how the United States acquired ownership, except: (1) lands located on the Outer Continental Shelf, and (2) lands held for the benefit of Indians, Aleuts, and Eskimos.
Recharge	Process by which water infiltrates and is added to an aquifer, either directly or indirectly by way of another rock formation; also, the water itself.
Resource	A concentration of naturally-occurring solid, liquid, or gaseous material in or on the Earth's crust in such form and amount that economic extraction of a commodity from the concentration is currently or potentially feasible. *Identified resources* are resources whose location, grade, quality, and quantity are known or estimated from specific geologic evidence.
Responsible agency	The organization that has the legal duty to ensure that a project complies with the appropriate rules and regulations.
Right-of-way	The right to pass over property owned by another. The strip of land over which facilities such as roadways, railroads, or power lines are built.
Saturated zone	Zone in which all the connected interstices or voids in rock or soil are filled with water under pressure equal to, or greater than, atmospheric pressure. The water table is commonly considered to be at the top of the zone of saturation.
Seismicity	The likelihood of an area being subject to earthquakes.
Significant effect	A substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.
Source reduction	In this document, measures to reduce the amount or types of municipal solid waste generated.
Subsidence	Sinking or settlement of the land surface, due to any of several processes but frequently from the removal of ground water. As commonly used, the term relates to the vertical downward movement of natural surfaces, although small-scale horizontal displacement also may be present.

TERM	DEFINITION
Sump	An excavation dug in a storage area to collect spillage or drainage. Usually an impermeable material is used to line the sump to keep solution from escaping into the outside environment.
Threatened species	Species which, although not presently threatened with extinction, are likely to become endangered in the foreseeable future in the absence of special protection and management efforts.
Unconfined water	Ground water not under artesian conditions. Generally used to describe water that does not rise above the level at which it is first found, at the time it is found. Seasonal changes in both unconfined and confined water levels may take place as a result of variations in recharge and discharge.
Underflow	Water moving parallel to a stream course through alluvium beneath the streambed.
Unsaturated zone	Zone in which the connected interstices or voids in a permeable rock are not filled with water and there can be movement of air. Generally, the zone between the land surface and the water table, but a zone of aeration can exist below an artesian aquifer, and below a perched water body.
Unusual plant assemblages (UPA)	Stands of vegetation identified in the CDCA which can be recognized as extraordinary due to one or more factors, which are unusual age, unusual size, unusually high cover or density, or disjunction from main centers of distribution.
Visual resource	The physical features of a landscape which can be seen (e.g., land, water, vegetation, structures, and other features).
Waste Discharge Requirements (WDRs)	Regulations described in CCR Title 23, Diversion 3, Chapter 15, which governs discharge of wastes to land in order to preserve the quality of the state's surface and ground water.
Waste stream	The total sum of waste materials present from origin to disposal.
Wilderness Study Area (WSA)	A roadless area of public lands which the BLM has determined may possess the wilderness qualities described in the Wilderness Act of 1964. WSAs were established in order to study the suitability of the areas for possible designation as wilderness by Congress. BLM protects each WSA's wilderness qualities until Congress decides whether or not the WSA will be designated as wilderness.
Working face	Portion of the landfill where solid wastes are presently being discharged.
Zone of influence	The area overlying the cone of pumping depression, or cone of water table depression. Also used with regard to tortoise survey transects beyond site boundaries.

4.2 DEFINITION OF ABBREVIATIONS

1. The definitions below are provided as clarification for abbreviations used in this document.

ABBREVIATION	DEFINITION
AB 939	Assembly Bill 939, also known as the California Integrated Solid Waste Management Act of 1989
AB 2448	Assembly Bill 2448 (Eastin)
ACEC	Area of Critical Environmental Concern
AQIA	Air Quality Impact Analysis
AP	Agricultural Preserve
ATSF	Atchison, Topeka, and Santa Fe Railway Company, Inc.
BLM	Bureau of Land Management
CAAQS	California Ambient Air Quality Standards
Cal-Poly	California State Polytechnic University, Pomona
CARB	California Air Resources Board
Cargill	Cargill Company
CCR	California Code of Regulations
CDCA	California Desert Conservation Area
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIWMB	California Integrated Waste Management Board
CLC	Cadiz Land Company
cm/sec	centimeter per second
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
COE	U.S. Army Corps of Engineers
CoIWMP	County Integrated Waste Management Plan
CoSWMP	County Solid Waste Management Plan
County	County of San Bernardino
CUP	Conditional Use Permit
dBA	A-weighted sound level in decibels
DMAs	Desert Management Areas
DWR	California Department of Water Resources
EIR	Environmental Impact Report

ABBREVIATION	DEFINITION
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FLPMA	Federal Land Policy Management Act
g	acceleration of gravity (32.2 ft/sec^2)
GCL	geosynthetic clay liner
H_2S	hydrogen sulfide
HAZMAT	hazardous materials
HDPE	high density polyethylene
HMP	Habitat Management Plan
HQ	Hazard Quotient
I-40	Interstate 40
LEA	local enforcement agency
LEL	lower explosive limit
Leq	equivalent sound level
Lmax	maximum sound level
LNG	liquefied natural gas
LOS	level of service
MCE	maximum credible earthquake
MCL	Interim EPA Maximum Contaminant Drinking Water Level
MDAQMD	Mojave Desert Air Quality Management District
MEI	maximum exposed individual
mg/L	milligrams per liter
MPE	maximum probable earthquake
mph	miles per hour
MRFs	Materials Recovery Facilities
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
National Chloride	National Chloride Company of America, Inc.
NEPA	National Environmental Policy Act
NO	nitric oxide
NO_2	nitrogen dioxide
NOAA	National Oceanic Atmospheric Administration
NPDES	National Pollution Discharge Elimination System

ABBREVIATION	DEFINITION
NPS	U.S. National Park Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NO_x	oxides of nitrogen
OCR	over-consolidation rate
OHWM	ordinary high water mark
OSHA	Occupational Health and Safety Administration (federal)
O_3	ozone
P_b	lead
PM_{10}	particulate matter less than 10 microns in aerodynamic diameter
ppb	parts per billion
ppm	parts per million
PSD	prevention of significant deterioration
PUC	Public Utilities Commission
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
RDSI	Report of Site Disposal Information
ROC	reactive organic compounds
ROG	reactive organic gases
ROWD	Report of Waste Discharge
RWQCB	California Regional Water Quality Control Board
SBCAPCD	San Bernardino County Air Pollution Control District
SBCDEHS	San Bernardino County Department of Environmental Health Services
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCR	Selective catalytic reduction
SCRRA	Southern California Regional Rail Authority
SEDAB	Southeast Desert Air Basin
SHPO	State Historic Preservation Officer
SMARA	Surface Mining and Reclamation Act of 1975
SO_2	sulfur dioxide
SO_4	sulfates
SPCC	Spill Prevention, Control, and Countermeasure Plan
SWFP	Solid Waste Facilities Permit
SWRCB	State Water Resources Control Board

ABBREVIATION	DEFINITION
SWPPP	Stormwater Pollution Prevention Plan
TDS	total dissolved solids
UBC	Uniform Building Code
UFC	Uniform Fire Code
UPA	Unusual Plant Assemblages
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UZM	Unsaturated Zone Monitoring
VOC	volatile organic compound
WDRs	Waste Discharge Requirements
WMI	Waste Management, Inc.
WMNA	Waste Management of North America, Inc.
WSA	Wilderness Study Area

CHAPTER 5.0
LIST AND QUALIFICATIONS OF PREPARERS

5.0 LIST AND QUALIFICATION OF PREPARERS

1. This Final EIR/EIS has been prepared by Environmental Solutions, Inc. under the direction of the County Planning Department and BLM. The County and BLM provided information and assistance in preparing this document and independently evaluated the information contained herein.

County of San Bernardino

Randy Scott
Senior Planner, Environmental Team

C. Aileen Deardorff
Senior Associate Planner

Phil Smith
Special Projects Coordinator, Environmental Management Group

Bureau of Land Management

Richard Fagan
Area Manager, Needles Resource Area

Doug Romoli
Project Lead, California Desert District

William Boarman
Biologist, California Desert District

Larry Foreman
Biologist, California Desert District

George Meckfessel
Archaeologist, Needles Resource Area

Rob Waiwood
Minerals Resource Planner, California Desert District

William Wiley
Environmental Protection Specialist, Needles Resource Area

2. The following staff of Environmental Solutions, Inc. participated in the preparation of this document.

JoAnn C. Hadfield
Project Manager
B.S. Urban Planning, University of Utah, 1976
Completion of Civil Engineering Coursework, San Diego State University, 1984
Engineering in Training Certificate (1986)

Fourteen years of planning and environmental experience including:

- Preparation and/or management of over 60 CEQA documents encompassing a diversity of project types and scale.
- Consultation to public agencies for objective third-party review of CEQA documents, and provision of CEQA training for public sector staff.
- Development of focused environmental studies including opportunities and constraints analysis, biological studies, and infrastructure capacity evaluation.

Deanna M. Kress
Environmental Scientist
B.F.A. Design, California State University, Fullerton, 1989
A.A. Orange Coast College, 1985

Four years experience in preparation of environmental documents including:

- EIS, EIR, and Environmental and Biological Assessments.
- Preparation of technical analyses, including evaluations of existing conditions, visual impacts, land use consistency/compatibility, and cumulative impacts.
- Processing of environmental documentation for NEPA/CEQA compliance.
- Environmental document quality assurance/quality control and coordination.

Tim C. Lassen
Vice President/Project Director
B.S. Civil Engineering, Purdue University, 1970
California Business Law Institute, Environmental Regulations, 1981
Registered Professional Engineer, State of California

Twenty-two years experience in project management and engineering including:

- Management of interdisciplinary team in the preparation of EIS, air quality permitting activities, archaeological inventory and regulatory documentation, and biological assessment.
- Preparation of EISs including analysis of a broad scope of environmental and socioeconomic issues.
- Development of comprehensive risk assessments.
- Projects involving site characterizations, feasibility investigations, hydrogeologic assessment reports, remedial action plan development, and cleanup implementation of contaminated soil and ground water.

Michael L. Leonard
Senior Project Manager
M.S. Civil Engineering (Geotechnical), University of Illinois, 1974
B.S. Civil Engineering, University of Illinois, 1972

Eighteen years experience in geotechnical engineering and hazardous waste consulting, including:

- Project Manager for engineering design, permitting and construction of Class III landfills.
- Project Manager for industrial stormwater NPDES permit applications.
- Technical reviewer of report evaluating remediation alternatives and technologies.
- Technical reviewer for geology and hydrology for EIRs/EISs.
- Environmental Assessments as precursors to industrial real estate actions.

Robert C. Mason
Senior Project Manger
M.A. Urban and Regional Studies, University of Southern California, 1978
B.A. Urban and Regional Studies, California State University, Northridge, 1975

Fifteen years experience as project manager for various projects including:

- Management of over two dozen major NEPA/CEQA documents for a variety of projects worldwide.
- Development of risk assessments, extensive archaeological and cultural resources investigations and reporting, biological studies, and analysis of waste disposal methods.
- Management of Phase I and II remedial site investigations for industrial and commercial properties.

CHAPTER 6.0
ORGANIZATIONS AND PERSONS CONSULTED

6.0 ORGANIZATIONS AND PERSONS CONSULTED

1. The persons and organizations listed below submitted comments or substantial information regarding the proposed action during preparation of this EIR/EIS or its supporting documents. Persons or organizations contacted regarding specific information are listed by reference throughout the EIR/EIS and in Chapter 8.0.

FEDERAL AGENCIES

• U.S. Fish and Wildlife Service Laguna Niguel, California	Ray Bransfield
• U.S. National Park Service - Joshua Tree National Monument	Robert Moon

STATE AGENCIES

• Public Utilities Commission Los Angeles, California	Raymond Toohey
• California Department of Fish and Game Sacramento, California	Frank Hoover

COUNTY OF SAN BERNARDINO

• Mojave Desert Air Quality Management District Victorville, California	Tom Guevara Christian Ihenacho Kayode Kadara
• County Solid Waste Management Department San Bernardino, California	Mike Williams
• County Department of Environmental Health Services (as the Local Enforcement Agency) San Bernardino, California	Pam Bennett
• County Department of Building and Safety County Geologist San Bernardino, California	Wes Reeder
• County Department of Land Development Engineering San Bernardino, California	Richard Thompson
• San Bernardino County Museum Redlands, California	Dr. Allan Griesemer

LOCAL AGENCIES

• City of Barstow Planning Department Barstow, California	Mike Massimini
• City of Twentynine Palms Twentynine Palms, California	Bill Gutgesell

• City of San Bernardino Department of Planning and Building Services San Bernardino, California	Deborah Woldruff
• City of Victorville - Planning Department Victorville, California	

PRIVATE ORGANIZATIONS

• Rail•Cycle Los Angeles, California	Stu Clark Phil Beautrow Hal Cahill Glen Odell
• Waste Management of North America Irvine, California	Neil Mohr
• Atchison, Topeka, and Santa Fe Railway Los Angeles, California	Delbert Miller Bob Brendza
• Jacobs Engineering Group, Inc. Pasadena, California	Sandra Alarcón-Lopez Jim Goepel
• Ecological Research Services Claremont, California	Debby Aber Alice Karl
• Wyle Laboratories El Segundo, California	
• Caterpillar Tractor Co. Peoria, Illinois	Lester Bergsten

CHAPTER 7.0
FINAL EIR/EIS DISTRIBUTION LIST

7.0 FINAL EIR/EIS DISTRIBUTION LIST

1. The distribution list for the Final EIR/EIS was developed by the BLM - California Desert District, and by the County Planning Department.

- FEDERAL OFFICIALS AND AGENCIES
  - Honorable Barbara Boxer
  - Honorable Diane Feinstein
  - Honorable George Brown
  - Honorable Al McCandless
  - Honorable Jerry Lewis
  - Honorable Duncan Hunter
  - U.S. Air Force Flight Test Center
  - U.S. Army Corps of Engineers
  - U.S. Army National Training Center, Fort Irwin
  - U.S. Bureau of Indian Affairs
  - U.S. Bureau of Mines
  - U.S. Bureau of Reclamation
  - U.S. Soil Conservation Service
  - U.S. Department of Health and Human Services
  - U.S. Department of Justice, U.S. Attorney's Office (L.A. Branch)
  - U.S. Environmental Protection Agency, Office of Federal Activities
  - U.S. Federal Aviation Authority
  - U.S. Fish & Wildlife Service
  - U.S. Forest Service
  - U.S. Geological Survey
  - U.S. National Park Service
  - U.S. Marine Corps, Twentynine Palms
  - U.S. Marine Corps, Barstow
- STATE OF CALIFORNIA OFFICIALS, AGENCIES, AND REGIONAL AGENCIES
  - Honorable Kathleen Honeycutt
  - Honorable Don Rogers
  - Honorable Robert B. Presley
  - Honorable Ruben S. Ayala
  - Honorable William Leonard
  - Honorable Paul Woodruff
  - California Air Resources Board
  - California Department of Fish & Game
  - California Department of Health Services
  - California Department of Transportation
  - California Energy Commission
  - California Highway Patrol
  - California Division of Forestry
  - California Integrated Waste Management Board
  - California Public Utilities Commission
  - California Regional Water Quality Control Board/Colorado Region
  - California State Lands Commission
  - California State Office of Planning and Research
  - California State Polytechnic University, Pomona
  - California State Resource Agency
  - Colorado River Board
  - Mojave Desert Air Quality Management District
  - Mojave Water Agency
  - Southern California Regional Rail Authority/Metrolink
  - South Coast Air Quality Management District
  - Southern California Association of Governments
- COUNTIES, CITIES, AND LOCAL AGENCIES
  - City of Adelanto
  - Town of Apple Valley
  - City of Azusa
  - Baker Communities Services District
  - Baker Unified School District
  - City of Barstow
  - Barstow Fire District
  - Barstow Heights Community Water District
  - Barstow Heights Community Services District
  - Barstow Unified School District
  - Big Bear Community Services District
  - City of Big Bear Lake
  - City of Chino
  - City of Chino Hills
  - City of Colton
  - City of Commerce
  - City of El Segundo
  - City of Fontana
  - City of Grand Terrace
  - City of Hesperia
  - City of Highland
  - Imperial County
  - County of Inyo
  - County of Kern
  - City of Loma Linda

- County of Los Angeles
- County of Los Angeles Sanitation Districts
- Los Angeles County, Department of Regional Planning
- Los Angeles Department of Water and Power
- City of Montclair
- Morongo Basin Unified School District
- City of Needles
- Needles Fire Department
- Needles Water Department
- Needles Unified School District
- Newberry Springs Community Services District
- Newberry Springs Fire Department
- Newberry Springs Water
- City of Ojai
- City of Ontario
- County of Orange
- City of Rancho Cucamonga
- City of Redlands
- City of Rialto
- County of Riverside
- San Bernardino Associated Governments
- City of San Bernardino
- San Bernardino County Agricultural Commissioner
- San Bernardino County Board of Supervisors
- San Bernardino County Building and Safety Department
- San Bernardino County Department of Economic & Community Development
- San Bernardino County Department of Environmental Health Services
- San Bernardino County Local Enforcement Agency, Department of Environmental Health Sevices
- San Bernardino County Department of Forestry and Fire Warden
- San Bernardino County Land Development Division
- San Bernardino County Local Agency Formation Commission
- San Bernardino County Museum
- San Bernardino County Planning Commission
- San Bernardino County Public Health Department
- San Bernardino County - AAO/ Public Works Group
- San Bernardino County Regional Parks
- San Bernardino County Sheriff's Department
- San Bernardino County Solid Waste Advisory Task Force
- San Bernardino County Solid Waste Management Department
- San Bernardino County Special Districts Office
- San Bernardino County Transportation/Flood Control
- San Diego County Department of Public Works
- Silver Valley Unified School District
- City of Twentynine Palms
- Twentynine Palms Chamber of Commerce
- Twentynine Palms Water District
- City of Upland
- City of Victorville
- City of Yucaipa
- Town of Yucca Valley

- LIBRARIES
  - A.K. Smiley Library
  - Adelanto Branch Library
  - Anaheim Public Library
  - Apple Valley Branch Library
  - Barstow Branch Library
  - Hesperia Branch Library
  - Imperial County Library
  - Joshua Tree Branch Library
  - Lucerne Valley Branch Library
  - Needles Branch Library
  - Feldheym Central Library
  - San Bernardino Branch Library
  - Victorville Branch Library
  - Twentynine Palms Branch Library
  - Yucca Valley Branch Library

- NEWSPAPERS
  - Desert Dispatch - Karen Kunde
  - Desert Sun - Priscella Nordyke
  - Desert Sun - Phil Hampton
  - Desert Trail - Paula Menger
  - Desert Trail - Howard Decker
  - High Desert Star Publishing Company
  - Hi-Desert Star - Kurt Schauppner
  - Inland Valley Daily Bulletin - Lee Peterson
  - Intrepid Reporter
  - Los Angeles Times - Tom Gorman
  - Needles Desert Star

- Press-Enterprise - Environmental Reporter
- The Sun - Sam Atwood, Environmental Reporter
- The Sun - Chuck Mueller
- Valley Wide Newspaper
- Victorville Daily Press

- ORGANIZATIONS
  - ADH Associates, Inc.
  - All American Pipeline
  - American Borate Company
  - Aqua Caliente Indian Reservation
  - Audubon Society
  - BAS & Associates
  - Best, Best and Krieger, Attorneys at Law
  - BFI
  - Bighorn Institute
  - BKK Corporation
  - Bornhauser Company
  - Bradco Development
  - Bryan Stirrat & Associates
  - Burrtec Industries
  - Cadiz Land Company, Inc.
  - California Communities Against Toxics
  - California Federation of Mineralogical Societies
  - California Native Plant Society
  - Cargill Salt
  - Citizens for a Better Environment
  - Coldwell Banker Realty
  - Converse Consultants
  - Dames & Moore
  - Davis, Louise Baker Consultant
  - Desert Citizens Against Pollution
  - Desert Environmental Response Team
  - Desert Protective Council
  - Desert Tortoise Preserve Commission
  - EBA Wastechnologies
  - Ecology Center of Southern California
  - EMCON Associates
  - Environmental Defense Fund
  - Friends of Mojave Road
  - Friends of San Gabriel River
  - Gresham, Varner, Savage, Nolan & Tilden, Attorneys at Law
  - Geosyntec Consultants
  - Hall, Estill, Hardwick, Gable, Golden & Nelson
  - Heaps Peak Enterprises
  - Heller, Ehrman, White & McAulliffe
  - Hidden Valley Resources
  - High Desert Multi-Use Coalition
  - Holcomb Valley Mining District
  - Inland Container
  - Jack's Disposal Company
  - Janus Consultant Services, Inc.
  - Kaiser Steel Resources
  - Landfill Alternatives Save Environmental Resources (LASER)
  - Lilburn Corporation
  - Matich Construction
  - Michael Brandman and Associates
  - Mine Reclamation Corporation
  - Minerals Exploration Coalition
  - Morongo Basin Conservation Association
  - Myra Frank and Associates
  - National Chloride
  - National Association of Mining Districts (Field Office)
  - Native American Heritage Commission
  - Native American Observer - Phillip Ibanez
  - Natural Resources Defense Council
  - Newberry Springs Property Owners Association
  - Ogden Environmental
  - Orrich Herrington & Sutcliffe, Attorneys at Law
  - Pfizer, Inc.
  - Pacific First Financial
  - Page, George C - Museum
  - Patrick & Henderson
  - Pluess-Staufer
  - Rogers and Wells
  - Ryan & Associates, Inc.
  - SAIC
  - SCS Engineers
  - Sierra Club
  - Sierra Club - Peter Burk
  - Sierra club - Louise French
  - Sierra Club Legal Defense Fund
  - Silver Valley Realty
  - Southern California Edison
  - Southwest Portland Cement
  - Tehachapi Valley Research Center
  - The Environmental Solutions Project
  - Total Waste Conversion, Inc.
  - Toxic Assessment Group
  - Twentynine Palms Reservation
  - Warner Engineering
  - Webber & Webber
  - Western Mining Council
  - Wilderness Society
  - URS Consultants

- INDIVIDUALS
  - Stephen Ahmann
  - Sharon Apfelbaum
  - Allen Arata
  - Robert Asgian
  - Morris A. Balderman
  - Mike Barbusca
  - Allen Barter
  - Dana F. Bell
  - Bob Bennett
  - Elmo and Gloria Bennett
  - Virginia C. Benton
  - Rick Best
  - Howard Blair
  - Gail Borchard
  - Richard Brand
  - Sylvester L. Brooks
  - Orville and Louise Browy
  - Mark Bulot
  - Katie Cannarella
  - Jean Carbone
  - Christine Carraher
  - Joyce and John Carraher
  - Ruby Ceballos
  - Patricia Chapman
  - Vera Ciborowski
  - Lois Clark
  - William M. Claypool III
  - Louis A. Conter
  - Jim Copeland
  - Karen Crane
  - Phylis Crawford
  - John Curry
  - Steve Darus
  - Paul Davis
  - William M. Davis
  - James Dodson
  - Joan Dotson
  - Eric M. Ducat
  - Deborah Edwards
  - Gerald W. Eller
  - Alice Engelskirchen
  - Bill Faulkner
  - Arthur and Iva Feldman
  - Karen Felker
  - Robert T. Filler
  - Dave Fisher
  - Mary Ann Fisher
  - Valeria Foltz
  - Warren and Elizabeth Forgey
  - Charles W. and Donna L. Fox
  - Mike Gallagher
  - Wilson Goddard
  - Frank J. Giesing
  - George Goemans
  - Mary Grimsley
  - Heather Hahn
  - Howard Harsh
  - Steven Hartman
  - Mark Heuston
  - John Heitman
  - Oscar Hellrich
  - Mary Ann Henry
  - Esther L. Herbert
  - Susan Hickman
  - Frank Hoover
  - Rick Horlacher
  - Linda Horn
  - Elden Hughes
  - W. Leon Hunter
  - Prescott and Paula Johnston
  - Joe Kamansky
  - Ellen Kindsvater
  - Bert C. Klein
  - Della Ann Knaggs
  - Jean M. LaRose
  - Patricia "Corky" Larson
  - Dr. June Latting
  - Harry Lawrence
  - John and Mary Lohe
  - Gary Lopez
  - Ruth Lopez
  - Beverly Lowry
  - Leland Lubinsky
  - Arlene Lucas
  - William Manning
  - D. J. Masker
  - Valery Marshall
  - Emmanuel N. Mba
  - Michael McCartney
  - Kay Melcher
  - Floyd and Anita Mercy
  - Pat Mitchell
  - Loleeta Miller
  - George and M. Moore
  - Dick Moyle
  - Jim Murray
  - William Nash
  - Jean Nicol
  - Brian Noonan
  - Jim Norman
  - Dr. Kenneth S. Norris
  - Gary Overson
  - Fred Owings
  - Art Pacher
  - Burr Patterson
  - Carol Pedder

- Joe Pizzitola
- David Pilpel
- Stefan Pollmann
- Jim Poss
- William Pratt
- Judith A. Pruitt
- William M. Raisner
- Martin Rapp
- Vernon and Twila Ring
- Bill Rinkes
- George W. Robinson
- Dr. John Rothenberry
- Don Rusk
- Marlene Russell
- David E. Sabol
- Connie Sachs
- Helene Schpak
- Billie Schwarz
- George Scott
- Dave Sharp
- Lynnette M. Shmakoff
- Nancy Sidhu
- Mark Siegmund
- Chris Smith
- Michelle Smith
- Robert and Deborah Staggs
- Harold Steingold
- Bernard D. Steppe
- John Stevens
- Katrina Stevens
- Mary Swedelius
- Ann Tate
- Joan Taylor
- Larry Taylor
- Anthony Thorpe
- James and Julianne Toenjes
- Rebecca M. Turner
- Andrew Vesselinovitch
- Julia Ward
- Joan C. Welch
- Francis M. Wheat
- Cam Wheaton
- Howard Wilshire
- Carol Wiley
- Jeff Wright

- INDIVIDUALS FOR WHICH NO ADDRESS WAS PROVIDED
  - Richard Reynolds

CHAPTER 8.0
REFERENCES AND RESOURCES

8.0 REFERENCES AND RESOURCES

8.1 BACKGROUND TECHNICAL REPORTS

1. Various technical reports have been prepared by Rail•Cycle which have been used in the preparation of the EIR/EIS, as shown in Table 8.1. These technical reports are available for review at the following locations:

Planning Department
San Bernardino County
385 North Arrowhead Avenue
San Bernardino, California 92415

California Desert District
U.S. Bureau of Land Management
6221 Box Springs Boulevard
Riverside, California 92507

TABLE 8.1

BACKGROUND TECHNICAL REPORTS(1)

SUBJECT/REPORT	AUTHOR	DATE
GEOLOGY AND SOILS		
• Phase I: Geology, Hydrogeology and Hydrology; Site Characterization Study - Bolo Station Facilities	Jacobs	October 1990
• Phase II: Geologic, Hydrogeologic and Geotechnical Site Characterization Study - Bolo Station Facilities	Jacobs	December 1991
• Gravity and Magnetic Studies of the Rail•Cycle Project Site	Shawn Biehler	May 28, 1991
• Geologic Mapping Southeast Bristol Mountains	Jacobs	July 1992
• Earthquake Damage Inspection Bolo Station Landfill and Surrounding Communities	Rail•Cycle	July 1992
• Geophysical Survey Report	Jacobs	December 1992
• Ground Water Monitoring Well Installation Report	Jacobs	December 1992
• Geophysical Field Exploration Report	Jacobs	March 1993
• Project Note No. 94	Jacobs	May 1993
• Technical Report: Response to Bureau of Land Management Inquiries Regarding Settlement Calculations for Bolo Station Landfill	Rail•Cycle	September 1993
• Project Note No. 97	Jacobs	October 1993
• Analysis of Geologic Issues Related to Seismic Risk on the Proposed Rail•Cycle Bolo Station Landfill	Gary Rasmussen & Associates	March 1994
MINERAL RESOURCES		
• Ground Water Monitoring Report (First Round) and Vertical Mineral Quality Assessment Study	WMNA	July 1991
• Mineral Potential Report for Selected Land in the Mojave Desert Bolo Station Facilities	Jacobs	August 1991
• Records Search of Mineral Resources on the Offered Lands	Jacobs	May 1992
• Position Paper - Rail•Cycle Bolo Station Landfill	Condor Earth Technologies	March 1993
• Hydrogeological and Geotechnical Assessment 500-Foot Borehole Bolo Station Landfill	Rust Environment and Infrastructure	October 1993
SURFACE HYDROLOGY AND GROUND WATER		
• Phase I: Geology, Hydrogeology and Hydrology; Site Characterization Study - Bolo Station Facilities	Jacobs	October 1990
• Ground Water Monitoring Report (First Round) and Vertical Mineral Quality Assessment Study	WMNA	July 1991

(1) The reports that are highlighted by shading have been prepared since distribution of the Supplement.

TABLE 8.1

BACKGROUND TECHNICAL REPORTS[1]
(Continued)

SUBJECT/REPORT	AUTHOR	DATE
SURFACE HYDROLOGY AND GROUND WATER (Continued)		
• Ground Water Monitoring Report	WMNA	
- Second Round		October 1991
- Third Round		November 1991
- Fourth Round		April 1992
• Phase II: Geologic, Hydrogeologic and Geotechnical Site Characterization Study - Bolo Station Facilities	Jacobs	December 1991
• Bolo Station Landfill - Evaluation of Regulatory Jurisdiction	LSA Associates	March 1992
• Bolo Station Landfill, Design and Operational Features for Prevention and Mitigation of Ground Water Contamination	Rail•Cycle	October 1992
• Potable Water Supply and Distribution: Water Supply Well Simulation	Rust Environment and Infrastructure	March 1993
• Bolo Station Landfill Alternative Liner Design Evaluation Report	Rust Environment and Infrastructure	March 1993
• Bolo Station Landfill, Summary Report of Potential Groundwater Impact and Ground Settlement Issues	Rust Environment and Infrastructure	June 1993
• Drainage Report for Bolo Station Landfill	Rust Environment and Infrastructure	January 1994
• Hydrogeologic Evaluation of the Bolo Station Landfill Site	P.E. LaMoreaux & Associates	April 1994
BIOLOGY		
• Biology, Site Characterization Study, Preliminary Biological Survey-Bolo Station Facilities	Ecological Research Services	August 1990
• Wintering Bird Survey - Bolo Station Facilities	Ecological Research Services	July 1991
• Annual Plant Survey - Bolo Station Facilities	Ecological Research Services	August 1991 Revised March 1992
• Desert Tortoise Survey - Bolo Station Facilities	Alice E. Karl in association with Ecological Research Services	September 1991 Revised March 1992
• Desert Tortoise Survey Rail•Cycle Alternative Project Site - Cadiz Valley	Alice E. Karl in association with Ecological Research Services	March 1992
• Kit Fox (*Vulpes Macrotis*) Density Study - Bolo Station Facilities	Ecological Research Services	July 1991 Revised March 1992

(1) The reports that are highlighted by shading have been prepared since distribution of the Supplement.

TABLE 8.1

BACKGROUND TECHNICAL REPORTS[1]
(Continued)

SUBJECT/REPORT	AUTHOR	DATE
BIOLOGY (Continued)		
• Sensitive Species Studies of Offered Lands - Bolo Station Facilities	Ecological Research Services	January 1992
• List of Sensitive Plants and Animals in the Region Surrounding the Bolo Station Facilities Project Site	Ecological Research Services	March 1992
• Literature Survey of Sensitive Species Rail•Cycle Alternative Site - Cadiz Valley	Ecological Research Services	June 1992
• Biological Assessment: Bolo Station Landfill Project	Rail•Cycle	February 1993
AIR QUALITY		
• Air Quality Site Characterization Study - Bolo Station Facilities	Jacobs	October 1990
• Addendum to Air Quality Site Characterization Study - Bolo Station Facilities	Jacobs	October 1991
• Enhanced Dust Control Program - Bolo Station Facilities	James Dunbar in Association with Waste Management Regional Design Group	September 1991
• Air Quality Monitoring Data Report - Bolo Station Facilities	Jacobs	March 1991 through February 1992
• Air Quality Impact Analysis - Bolo Station Facility	Jacobs	February 1992
• Estimate of Leachate and Condensate Liquid Volumes and Volatile Organic Emissions from Evaporation Pond	Rail•Cycle	October 1992
• Rail•Cycle Bolo Station Landfill Supplemental Air Quality Analysis	Rail•Cycle	May 1993
CULTURAL/PALEONTOLOGICAL		
• Cultural Resources Site Characterization Study Class III Cultural Resources Inventory - Bolo Station Facilities	Michael Lerch and Associates	September 1990
• Addendum to Cultural Resources Site Characterization Study Class III Cultural Resources Inventory - Bolo Station Facilities	Michael Lerch and Associates	April 1991
• Cultural Resources Significance Evaluation and Treatment Plan - Bolo Station Facilities	Michael Lerch in Association with Mecko Archaeological Consulting	August 1991
• Confidential Paleontological Assessment - Bolo Station Facilities	San Bernardino County Museum	December 1991
• Cultural Resource Inventory and Significance Evaluation, Final Report, Rail•Cycle - Bolo Station Facilities	Michael K. Lerch	August 1992

(1) The reports that are highlighted by shading have been prepared since distribution of the Supplement.

TABLE 8.1

BACKGROUND TECHNICAL REPORTS[1]
(Continued)

SUBJECT/REPORT	AUTHOR	DATE
LAND USE		
• Land Use Site Characterization Study - Bolo Station Facility	Jacobs	September 1990
• Land Use Application - Bolo Station Facilities	Rail•Cycle	March 14, 1991
• Agricultural Impact Report from the Proposed Rail•Cycle - Bolo Station Landfill	Edwin Barnes, Ph.D.	April 1993
MISCELLANEOUS		
• San Bernardino County Initial Study	Asher Hartel	December 27, 1990
• Rail•Cycle EIR/EIS Scoping Document - Bolo Station Facilities	Jacobs	December 1990
• Alternative Rail•Cycle Landfill Sites: Preliminary Analysis	Jacobs	December 1990 Updated May 1991
• Rail•Cycle Economic Benefits Analysis	Arthur Anderson & Company	April 1992

91-109 (7/5/94/lk)

(1) The reports that are highlighted by shading have been prepared since distribution of the Supplement.

8.2 REFERENCES

Arthur Anderson & Company. *Rail•Cycle Economic Benefits Analysis.* April 1992.

Barnes, Edwin, Ph.D. *Agricultural Impact Report from the Proposed Rail•Cycle Bolo Station Landfill.* April 1993.

Bassett, A.M., D.H. Kupfer, and F.C. Barstow. *Core Logs From Bristol, Cadiz and Darby Dry Lakes, San Bernardino County, California.* U.S. Geological Survey Bulletin 1045-D. 1959.

Biehler, S. *Gravity and Magnetic Studies of the Rail•Cycle Project Site*, San Bernardino County, California. 1991.

Bureau of Land Management (BLM). *Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan.* November 1988.

BLM. *California Desert Conservation Area - 1988, Desert Tortoise Habitat, Interim Map.* May 1989.

BLM. *Draft Raven Management Plan for the California Desert Conservation Area.* April 1990.

BLM and County of Riverside. *Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Proposed Eagle Mountain Landfill Project.* Prepared by RECON, Regional Environmental Consultants. July 19, 1991.

Brendza, Robert. Atchison, Topeka and Santa Fe Railway Company, Executive Department. Personal Communication. May 1993.

California Air Resource Board (CARB). *Suggested Control Measures (SCM) for Landfill Gas Emissions.* August 1990.

California Department of Fish and Game (CDFG). *Natural Diversity Database - Rare Find.* December 1991.

California Department of Water Resources (CDWR). *Sources of Powerplant Cooling Water in the Desert Area of Southern California -- Reconnaissance Study.* Bulletin 19-24. August 1979.

California Integrated Waste Management Board (CIWMB). *Interim Statewide Landfill Capacity Report.* Prepared for: The Policy, Research and Technical Assistance Committee. January 1992.

California Division of Mines and Geology (CDMG). *Geologic Map of California.* Needle Sheet. 1963.

CDMG. *Geologic Map of California.* San Bernardino Sheet. 1967.

CDMG. *Fault Map of California.* 1975.

CDMG. *Fault and Geologic Maps of California.* Bulletin 201. 1985.

CDMG. *Summary Report: Fault Evaluation Program, 1986-1987, Mojave Desert and Other Areas.* Open-File Report 88-1. 1988.

CDMG. *Preliminary Fault Activity Map of California.* Open-File Report 92-03. 1992.

Carr, W. J. *A Contribution to the Structural History of the Vidal-Parker Region, California and Arizona.* U.S. Geological Survey Professional Paper 1430. 1991.

Chambers Group, Inc. *West Valley Materials Recovery Facility: Final Environmental Impact Report.* August 1993.

Condor Earth Technologies, Inc. *Position Paper Rail•Cycle Bolo Station Landfill.* March 1993.

County of San Bernardino (County). *San Bernardino County General Plan.* Environmental Public Works Agency, Department of Land Management, Office of Planning. Adopted July 1989, as revised.

David Evans and Associates, Inc. *Final Environmental Impact Report for the Rail•Cycle Materials Recovery Facility, Commerce, California.* August 14, 1992.

Ecological Research Services, Inc. *Wintering Bird Survey Bolo Station Facilities, San Bernardino County.* Prepared for Rail•Cycle. July 1991.

Ecological Research Services, Inc. *Annual Plant Survey, Bolo Station Facilities, San Bernardino County.* Prepared for Rail•Cycle. March 1992c.

Ecological Research Services, Inc. *Proposed Preliminary Study of the Common Raven within a 30-Mile Radius of the Rail•Cycle Project Site.* June 1992b.

Ecological Research Services, Inc. *Kit Fox (Vulpes Macrotis) Density Study.* Bolo Station Facilities, San Bernardino County. Prepared for: Rail•Cycle. 1992c.

Ecological Research Services, Inc. *Life of Sensitive Plants and Animals in the Region Surrounding the Bolo Station Facilities Project Site.* Prepared for: Rail•Cycle. Submitted by: Jacobs Engineering Group, Inc. March 1992.

Engine, Fuel and Emissions Engineering, Incorporated (EF&EE, Inc.). *Controlling Locomotive Emissions in California: Technology, Cost-Effectiveness and Regulatory Strategy.* Submitted to CARB. October 1993.

Environmental Solutions, Inc. *Draft Environmental Impact Report/Environmental Impact Statement, Rail•Cycle-Bolo Station Landfill*. Prepared for the County of San Bernardino and U.S. Department of the Interior, Bureau of Land Management. 1992.

Environmental Solutions, Inc. *Supplement to Draft Environmental Impact Report/Environmental Impact Statement, Rail•Cycle-Bolo Station Landfill.* Prepared for the County of San Bernardino and U.S. Department of the Interior, Bureau of Land Management. 1993.

Fabian, J. Elite Realty of Twentynine Palms. Personal Communication. June 1, 1993.

Foreman, L. BLM - California Desert District Biologist. Personal Communication. 1992.

Gardner, D.L. *The Barstow-Bristol Trough, Central Mojave Desert, California.* In Fife, D.L., and Brown, A.R. (eds). *Geology and Mineral Wealth of the California Desert.* South Coast Geological Society, Santa Ana, California, p. 204-214. 1980.

Giroud, J.P. and Bonaparte, R. *Leakage Through Liners Constructed with Geomembranes: Part I - Geomembrane Liners.* Published in Geotextiles and Geomembranes 8. 1989a.

Giroud, J.P. and Bonaparte, R. *Leakage Through Liners Constructed with Geomembranes: Part II - Geomembrane Liners.* Published in Geotextiles and Geomembranes 8. 1989b.

Glazner, A.F., G.L. Farmer, W.T. Hughes, J.L. Wooden, and W. Pickthorn. *Contamination of Basaltic Magma by Mafic Crust at Amboy and Pisgah Craters, Mojave Desert, California.* Journal of Geophysical Research, v. 96, No. B8, p.13, 673-13, 691. 1991.

Groter, S.K. *Southern California Earthquake.* U.S. Geological Survey Open-File Report 92-533. 1992.

Hart, E.W. *Fault-Rupture Hazard Zone in California.* California Division Mines and Geology Special Publication 42. 1990.

Howard, K.A. and D.M. Miller. *Late Cenozoic Faulting at the Boundary Between the Mojave and Sonoran Blocks: Bristol Lake Area, California,* in Richard, Stephen M. (ed), *Deformation Associated with Neogene Eastern California Shear Zone, Southeastern California and Southwestern Arizona,* San Bernardino County Museums Special Publication 92-1. 1992.

Hutric, R. *Sanitary Landfill Settlement Rates.* Los Angeles County Sanitation District, June 1981.

Jacobs Engineering Group, Inc. *Phase I, Geology, Hydrogeology, and Hydrology Site Characterization Study, Bolo Station Facilities.* October 1990.

Jacobs Engineering Group. *Phase II Geologic, Hydrogeologic, and Geotechnical Site Characterization Study, Bolo Station Facilities, San Bernardino County.* Prepared for Rail•Cycle. 1991.

Jacobs Engineering Group, Inc. *Mineral Potential Report for Selected Land in the Mojave Desert - Bolo Station Facilities.* August 1991a.

Jacobs Engineering Group, Inc. *Draft Phase II: Geologic, Hydrogeologic and Geotechnical Site Characterization Study*. Vol. I. December 1991b.

Jacobs Engineering Group, Inc. *Air Quality Impact Analysis, Bolo Station Facility, San Bernardino County.* Prepared for: Rail•Cycle. February 1992.

Jacobs Engineering Group. *Geologic Mapping Southeast Bristol Mountain, San Bernardino County.* Prepared for Rail•Cycle. 1992a.

Jacobs Engineering Group, Inc. *Geophysical Survey Report.* December 1992b.

Jacobs Engineering Group, Inc. *Ground Water Monitoring Well Installation Report.* December 1992c.

Jacobs Engineering Group. *Geophysical Survey Report, Bolo Station Facilities, San Bernardino County.* Prepared for Rail•Cycle. 1993a.

Jacobs Engineering Group. *Geophysical Field Exploration Report, Bolo Station Facilities, San Bernardino County.* Prepared for Rail•Cycle. 1993b.

Jacobs Engineering Group, Inc. *Project Note No. 97.* October 1993c.

James M. Montgomery, Consulting Engineers, Inc. (Montgomery). *Water Treatment Principles and Design.* John Wiley and Sons, New York. 1985.

Jenkins, S. Staff Sgt. Public Affairs Chief 1 Marine Corps Air Ground Combat Center, Twentynine Palms. Personal Communication. May 28, 1993.

Karl, Alice E. *Desert Tortoise Survey Bolo Station Facilities, San Bernardino County.* In association with Ecological Research Services, Inc. March 1992.

Karlstrom, K.E., C.F. Miller, J.A. Kingsbury, and J.L. Wooden. *Pluton Emplacement Along an Active Ductile Thrust Zone, Piute Mountains, Southeastern California: Interaction Between Deformational and Solidification Processes.* Geological Society of America Bulletin, v. 105, p. 213-230. 1993.

Lawhead, D.N., and G.A. Scheid. *Biological Assessment for the Eagle Mountain Landfill Project.* Prepared for the Bureau of Land Management, Palm Springs. Prepared by RECON, San Diego. April 8, 1991.

LaMoreaux, P.E. and Associates. *Hydrogeologic Evaluation of the Bolo Station Landfill Site, San Bernardino County, California.* April 11, 1994.

Los Angeles County Sanitation Districts. Letter dated February 1993b.

LSA Assessments, Inc. (LSA). *Bolo Station Landfill Evaluation of Regulatory Jurisdiction.* March 11, 1992.

McFadden, L.D., S.G. Wells, and M.J. Jercinovich. *Influences of Eolian and Pedogenic Process on the Origin and Evolution of Desert Pavements.* Geology, June 1987, vol. 15, p. 504 to 508, Geological Society of America, Boulder, Colorado. 1987.

Miller, D.M., K.A. Howard and B.E. John. *Preliminary Geology of the Bristol Lake Region, Mojave Desert, California,* in Cooper, J.D., Compiler, *Geologic Excursions in the Mojave Desert.* Volume and Guidebook: Geological Society of America Cordilleran Section 78th Annual Meeting, California State University, Fullerton, p. 91-100. 1982.

Miller, D.M. *Cenozoic Deposits in the Lava Hills and Southern Bristol Mountains, Southeastern California*, in Sherrod & Nielson (eds.). *Testing Stratigraphy of Highly Extended Terrains, California, Arizona, and Nevada.* U.S. Geological Survey Bulletin 2053. 1993.

Miller, Paul. County of San Bernardino Forestry and Fire Warden Department, Letter dated February 26, 1992.

Miller, Paul. Personal communication, Fire Marshal, Forestry and Fire Warden Department, San Bernardino County. June 7, 1993.

Mojave Desert Air Quality Management District. Letter. 1994.

Moon, Robert. U.S. National Park Service. Joshua Tree National Monument. Center for Arid Lands Restoration. April 1993.

NeSmith, C. *Comments on the Rail•Cycle Bolo Station Mega-Landfill Report of Water Discharge.* In-House Memorandum State Water Resource Control Board. 1993.

Nicholson, L. *The Distribution and Abundance of the Desert Tortoise (Gopherus agassizii) on a Mining Site in Imperial County, and Recommendation for Conservation.* Supporting Technical Report for the Environmental Impact Report/Environmental Assessment (EIR/EA) for the proposed Mesquite Project. July 1984.

Parker, R.B. *Recent Volcanism At Amboy Crater, San Bernardino County, California.* Division of Mines and Geology Special Report 76. 1963.

Parsons, J.M. *Rail•Cycle's Proposed Bolo Station Mega-Landfill Near Amboy, San Bernardino County, October 16, 1992 Inspection of Trenches.* In-House Memorandum of SWRCB. 1992.

P.E. LaMoreaux and Associates, Inc. (PELA). *Hydrogeologic Evaluation of the Bolo Station Landfill Site, San Bernardino County, California.* Prepared for Rail•Cycle. April 1994.

Purcell, C. and D.G. Miller. *Grabens Along the Lower Colorado River, California and Arizona,* in Fife, D.L. and Brown, A.R. *Geology and Mineral Wealth of the California Desert.* South Coast Geological Society, p. 475-484, Santa Ana, CA. 1980.

Rail•Cycle. *Design and Operational Features for Prevention and Mitigation of Groundwater Contamination.* October 1992a.

Rail•Cycle. *Estimate of Leachate and Condensate Liquid Volumes and Volatile Organic Emissions from an Evaporation Pond.* October 1992b.

Rail•Cycle. *Rail•Cycle Bolo Station Landfill Supplemental Air Quality Analysis.* May 1993a.

Rail•Cycle. *Technical Report: Response to Bureau of Land Management Inquiries Regarding Settlement Calculations for Bolo Station Landfill.* September 1993b.

Rail•Cycle. *Engineering Calculation: Ability of HDPE Liner to Withstand Stretch Due to Settlement.* October 1993c.

Rasmussen, Gary S. & Associates. *Analysis of Geologic Issues Related to Seismic Risk on the Proposed Rail•Cycle Bolo Station Landfill Near Amboy, California.* March 31, 1994.

Remy, Thomas, and Moose. *Guide to the California Environmental Quality Act.* Solano Press Books. 1992.

Rodriquez. Joint Public Affairs Office. Marine Corps Air Ground Combat Center, Twentynine Palms. June 28, 1993.

Rosen, M.R. *Sedimentological and Geochemical Constraints on the Evolution of Bristol Dry Lake Basin, California, U.S.A. Palaeoclimatology, Palaeoecology, Volume 84.* 1991.

Rosen, R.R. *Sedimentologic, Geochemical, and Hydrologic Evolution of an Intracontinental, Closed-Basin Playa (Bristol Dry Lake, California): A Model for Playa Development and Its Implications for Paleoclimate.* Ph.D. Dissertation, University of Texas, Austin, Texas. May 1993.

Rust Environment and Infrastructure, Inc. *Evaluation of Potential Commercial Mineral Deposits Associated with the Bureau of Land Management's Request at Bolo Station Landfill, Amboy, California.* June 1993.

Rust Environment and Infrastructure, Inc. *Stability Analysis, Bolo Station Landfill.* November 22, 1993.

Rust Environment and Infrastructure. *Bolo Station Landfill Alternative Liner Design Evaluation Report,* March 1993a.

Rust Environment and Infrastructure. *Potable Water Supply and Distribution: Water Supply Well Simulation,* March 1993b.

Rust Environment and Infrastructure. *Bolo Station Landfill, Summary Report of Potential Groundwater Impact and Ground Settlement Issues.* June 1993c.

Rust Environment and Infrastructure. *Bolo Station Landfill Report of Disposal Site Information, Volume 1.* June 1993d.

Rust Environment and Infrastructure. *Hydrogeological and Geotechnical Assessment 500-Foot Borehole Bolo-Station Landfill.* 1993e.

Rust Environmental and Infrastructure. *Drainage Report for Bolo Station Landfill.* January 1994.

San Bernardino County Museum. *Confidential Paleontological Assessment: Bolo Station Facility San Bernardino County.* Prepared for Rail•Cycle. December 1991.

Southern California Association of Government (SCAG). *The Feasibility of Hauling Solid Waste by Railroad from the San Gabriel Valley to Remote Disposal Sites.* April 1988.

Springer, Kathleen B., San Bernardino County Museum. Personal Communication by Jacobs Engineering. April 1993.

State Water Resources Control Board (SWRCB). *Chapter 15 Technical Note No. 6: Liner Leakage Versus Waste Containment.* October 13, 1992.

SWRCB. *Memorandum: Comments on the Rail•Cycle Bolo Station Mega-Landfill Report of Waste Discharge.* August 11, 1993.

Thompson, D. Personal Communication. Assistant Land Development Engineer, County Surveyor, San Bernardino County. June 14, 1993.

Togue, Sgt. Military Personnel Clerk, Marine Corps Air Ground Combat Center, Twentynine Palms. Personal Communication. June 1, 1993.

URS. *Draft Environmental Impact Report for the Expansion of the Cadiz Land Company (SCH No. 89020203).* Prepared for San Bernardino County. 1993.

U.S. Fish and Wildlife Service (USFSW). *Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise, Including: Guidance for Formal Section 7 Consultations, Conservation Planning for Non-Federal Actions, Guidance for Incidental Take.* Prepared by: USFWS Regions 1, 2 and 6. November 1990.

U.S. Bureau of Mines. *Annual Report 1990: Calcium and Calcium Compounds.* July 1991.

Waiwood, Rob. Mineral Resource Specialist, BLM California Desert District, Personal Communication. June 1994.

Waiwood, Rob. United States Department of the Interior, Bureau of Land Management: *Mineral Report - Mineral Potential. Evaluation and Surface Interference Report for Selected Public Lands Within the Rail•Cycle Project, San Bernardino County, California.* Amended 1994.

Waste Management of North America, Inc. (WMNA). *Conceptual Site Development Plans for Rail•Cycle, Bolo Station Facilities.* January 1991.

Wensnousky, S.G. *Earthquake, Quaternary Faults, and Seismic Hazards in California.* Journal of Geophysical Research, v. 91, p. 12587-12631.

Wyle Laboratories. *Assessment of Noise Environments Around Railroad Operations.* July 1973.

APPENDIX A

PROCESS FOR PROTESTING AMENDMENT TO THE CALIFORNIA DESERT CONSERVATION AREA PLAN

APPENDIX A
PROCESS FOR PROTESTING AMENDMENT OF THE CALIFORNIA DESERT CONSERVATION PLAN

The resource management planning process includes an opportunity for administrative review via a protest to the BLM Director if you believe the approval of a proposed plan amendment would be in error (see 43 CFR 1610.5-2). Careful adherence to these guidelines will assist in preparing a protest that will assure the greatest consideration to your point of view.

Only those persons or organizations who participated in our planning process leading to this plan amendment may protest. If BLM's records do not indicate that you had any involvement in any stage in the preparation of a proposed amendment, your protest will be dismissed without further review.

A protesting party may raise only those issues which he or she submitted for the record during the planning process. New issues raised in the protest period should be directed to the California Desert District for consideration in plan implementation, as potential plan amendments, or as otherwise appropriate.

The period for filing a plan protest begins when the EPA publishes in the *Federal Register* its Notice of Availability of the Final Environmental Impact Statement containing the proposed amendment. The protest period extends for 30 days. There is no provision for any extension of time. To be considered "timely," your protest must be postmarked no later than the last day of the protest period. Also, although not a requirement, we suggest that you send your protest by certified mail, return receipt requested.

Protests must be filed in writing to:

Director (760)
Chief, Planning and Environmental Coordination
Bureau of Land Management
1849 C Street, NW
Washington, D.C. 20240

In order to be considered complete, your protest must contain, at a minimum, the following information:

1. The name, mailing address, telephone number, and interest of the person filing the protest.

2. A statement of the issue or issues being protested.

3. A statement of the part or parts of the plan amendment being protested. To the extent possible, this should be done by reference to specific pages, paragraphs, sections, tables, maps, etc. included in the document.

4. A copy of all documents addressing the issue or issues that you submitted during the planning process or a reference to the date the issue or issues were discussed by you for the record.

5. A concise statement explaining why the BLM State Director's decision is believed to be incorrect. *This is a critical part of your protest.* Take care to document all relevant facts. As much as possible, reference or cite the planning documents, environmental analysis documents, available planning records (i.e., meeting minutes or summaries, correspondence, etc.). A protest which merely expresses disagreement with the California State Director's proposed decision, without any data will not provide the BLM with the benefit of your information and insight. In this case, the Director's review will be based on the existing analysis and supporting data.

APPENDIX B
AIR QUALITY CALCULATIONS FOR FEDERAL RIGHT-OF-WAY EASEMENTS

APPENDIX B
AIR QUALITY CALCULATIONS
FEDERAL RIGHT-OF-WAY EASEMENTS

Objective

1. A concern was raised by the EPA that the Supplement to the Draft EIR/EIS may not have addressed certain aspects of the Clean Air Act (see Chapter 3.0 of this Final EIR/EIS, Document S-03, Comment 3). Specifically, federal agencies must assure that their actions conform to the attainment plan for the area established by Section 176(c) of the Federal Clean Air Act, Final Rule. The BLM and EPA have determined that the Final Rule would not apply to the land exchange portion of the proposed action, and would only apply to the right-of-way easement which the BLM would issue to Rail•Cycle for the temporary construction access road and the construction activities associated with installation of new power lines.

Purpose

1. Evaluate emissions potential from these two areas and, if necessary, calculate emissions and compare with de minimis levels presented in §93.153(b)(1) of the Final Rule presented in the November 30, 1993, Federal Register.

Approach

1. The following parameters were used for this analysis of air emissions associated with the two federal rights-of-way required by Rail•Cycle:
   - The de minimis levels included in §93.153(b)(1) are shown in Appendix B.1.
   - The locations of the proposed temporary access road and power line are shown in Figure 3.1 of the Supplement (see Appendix B.1).
   - The access road is approximately 600 feet long, will be unpaved, and may be used during the entire 6- to 9-month initial construction period.
   - The Draft EIR/EIS states that the construction period will include an operations schedule of 10 hours per day, 6 days per week for the entire 6 to 9 months.
   - The Draft EIR/EIS states that there will be approximately 170 individuals working at the site during construction.
   - The Draft EIR/EIS states that there will be an average of 110 pieces of equipment onsite, with a peak of approximately 140.
   - The project site is in a federal nonattainment area for PM_{10}. The site area is attainment for all other criteria pollutants.
   - The power line installation extends approximately 1,000 feet offsite. Depending on the spacing between poles, 4 to 10 poles will be installed. It is expected that this activity will require a maximum of two weeks, with three vehicles.
2. The de minimis levels are based on the sum of the annual emissions, since the above activities will occur during one 12-month period.

3. Sources of emissions on the access road include:
   - Fugitive dust emissions from the arrival and departure of employees.
   - Fugitive dust emissions from the delivery and return of heavy equipment.
   - Particulate, carbon monoxide, NO_x, ROG and SO_2 emissions from vehicle travel on the road.

4. Sources of emissions due to construction of the power line include:
   - Fugitive dust from vehicle travel on the road.
   - Fugitive dust associated with installation of the poles.
   - Particulate, carbon monoxide, NO_x, ROG and SO_2 emissions from vehicle travel and equipment operation.

5. As shown in Table 11 of the Rail•Cycle Air Quality Impact Analysis (Jacobs, 1992), fugitive dust emissions are much higher than associated mobile source (i.e., vehicle exhaust) PM_{10} emissions. In addition, the fugitive dust emissions are higher or similar to the magnitude of other criteria pollutant emissions. The de minimis levels for criteria pollutants are 100 tons per year.

6. The types of sources of emissions on the access road and power line will be similar to those presented in Table 11. Therefore, it can be assumed that if the fugitive dust PM_{10} emission rate does not exceed 50 percent of the de minimis levels, then the de minimis levels will be maintained.

7. Calculated Fugitive Dust PM_{10} Emission Rates:
   - For the access road, use equation presented in AP-42 (see Appendix C.1).

$$E = k\,(5.9)\left(\frac{s}{12}\right)\left(\frac{S}{30}\right)\left(\frac{W}{3}\right)^{0.7}\left(\frac{w}{4}\right)^{0.5}\left(\frac{365-p}{365}\right)$$

Where:

E = the emissions in lb/VMT (vehicle mile traveled)
k = Particle Size Multiplier (dimensionless)
s = silt content of road surface (%)
S = mean vehicle speed (mph)
W = mean number of wheels
w = mean number of wheels
p = number of days with at least 0.01 inches precipitation per year

Assume:

- Silt content is 25 percent.
- Mean vehicle speed of autos is 30 miles per hour.
- Mean vehicle speed of equipment delivery trucks is 20 miles per hour.
- Mean vehicle weight of autos is 2 tons.
- Mean vehicle weight of trucks is 60 tons.
- Number of days with at least 0.01 inches of precipitation equals 20 (see figure in AP-42, Appendix C.1).
- Mean number of wheels for autos is 4.
- Mean number of wheels for trucks is 22.

From AP-42, k for PM_{10} is 0.36.

Emissions from Autos

$$E = 0.36\ (5.9) \left(\frac{25}{12}\right)\left(\frac{30}{30}\right)\left(\frac{2}{3}\right)^{0.7} \left(\frac{4}{4}\right)^{0.5} \left(\frac{365\text{-}20}{365}\right)$$

$$= 3.15 \text{ lb/VMT}$$

Emissions from Trucks

$$E = 0.36\ (5.9) \left(\frac{25}{12}\right)\left(\frac{20}{30}\right)\left(\frac{60}{3}\right)^{0.7} \left(\frac{22}{4}\right)^{0.5} \left(\frac{365\text{-}20}{365}\right)$$

$$= 53.2 \text{ lb/VMT}$$

Where:

lb = Pound
VMT = Vehicle Mile Traveled

8. For travel on the power line road, the same equation is used except the specifications for the vehicles' change:

S = 30 miles per hour
W = 8 tons
w = 6 wheels

$$E = 0.36\ (5.9) \left(\frac{25}{12}\right)\left(\frac{30}{30}\right)\left(\frac{8}{3}\right)^{0.7} \left(\frac{6}{4}\right)^{0.5} \left(\frac{365\text{-}20}{365}\right)$$

$$= 10.2 \text{ lb/VMT}$$

For power pole installation, assume that the emission factor of 1.2 tons/acre/month (AP-42, §11.2.4.3), which is for heavy construction, is applicable.

Assume approximately 0.25 acres of construction at any one time.

9. Calculate Annual Emissions:
For the access road uncontrolled emissions:

$$\text{VMT by autos} = \frac{200 \text{ round trips}}{\text{day}} \left(\frac{6 \text{ days}}{\text{week}}\right)\left(\frac{4 \text{ weeks}}{\text{month}}\right)\left(\frac{9 \text{ months}}{\text{year}}\right) \times \left(\frac{500 \text{ ft x } 2}{\text{roundtrip}}\right)\left(\frac{\text{mile}}{5{,}280 \text{ ft}}\right)$$

$$= 4{,}900 \text{ VMT/yr}$$

Where:

yr = Year

$$\text{VMT by trucks} = \frac{150 \text{ x } 2 \text{ round trips}}{9 \text{ months}} \left(\frac{9 \text{ months}}{\text{year}}\right)\left(\frac{600 \text{ ft x } 2}{\text{roundtrip}}\right)\left(\frac{1 \text{ mile}}{5{,}280 \text{ ft}}\right)$$

$$= 68 \text{ VMT/yr}$$

For the travel on the power line road:

$$\text{VMT by trucks} = \frac{3\text{ round trips}}{\text{day}}\left(\frac{500\text{ ft x }2}{\text{roundtrip}}\right)\left(\frac{6\text{ days}}{\text{week}}\right)\left(\frac{2\text{ weeks}}{\text{year}}\right)\left(\frac{1\text{ mile}}{5{,}280\text{ ft}}\right)$$

$$= 6.8\text{ VMT/yr}$$

For the power line construction:

$$\frac{1.2\text{ tons}}{\text{acre•month}}\text{ x }0.25\text{ acre x }\frac{0.5\text{ month}}{\text{year}}$$

$$= 0.2\text{ tons PM}_{10}\text{/yr}$$

Total Annual PM_{10} Fugitive Emissions (Uncontrolled)

$$= \left(\text{VMT}_{\text{autos}}\text{ x }\frac{3.15\text{ lb}}{\text{VMT}} + \text{VMT}_{\text{truck}}\text{ x }\frac{53.2\text{ lb}}{\text{VMT}} + \text{VMT}_{\text{power}}\text{ x }\frac{10.2\text{ lb}}{\text{VMT}}\right)$$

$$\text{x }\frac{\text{ton}}{2000\text{ lb}} + 0.2\text{ tons PM}_{10}\text{/yr}$$

$$= \left(\frac{400\text{ VMT}}{\text{yr}}\text{ x }\frac{3.15\text{ lb}}{\text{VMT}} + \frac{68\text{ VMT}}{\text{yr}}\text{ x }\frac{53.2\text{ lb}}{\text{VMT}} + \frac{6.8\text{ VMT}}{\text{yr}}\text{ x }\frac{10.2\text{ lb}}{\text{VMT}}\right)$$

$$\text{x }\frac{\text{ton}}{2000\text{ lb}} + 0.2\text{ tons PM}_{10}\text{/yr}$$

$$= \left(\frac{15400\text{ lb}}{\text{yr}}\text{ x }\frac{3260\text{ lb}}{\text{yr}} + \frac{70\text{ lb}}{\text{yr}}\right)\frac{1\text{ ton}}{2000\text{ lb}} + \frac{0.2\text{ ton}}{\text{yr}}$$

$$= 9.7\text{ tons/yr}$$

10. Comparison - 9.7 tons/year of PM_{10} is expected to be emitted during the use by Rail•Cycle of these two federal rights-of-way. The 9.7 tons per year of PM_{10} is less than 10 percent of the de minimis level of 100 tons per year established by the Final Rule. As discussed earlier, PM_{10} is the most significant emission, therefore, none of the de minimis levels for any criteria pollutant will be exceeded. Therefore, the Final Rule in the November 30, 1993 Federal Register is not applicable for the proposed Bolo Station Landfill.

APPENDIX B.1

FEDERAL REGISTER §93.153 APPLICABILITY

(d), (e), or (f) are not included in the "total of direct and indirect emissions." The "total of direct and indirect emissions" includes emissions of criteria pollutants and emissions of precursors of criteria pollutants.

§ 93.153 Applicability.

(a) Conformity determinations for Federal actions related to transportation plans, programs, and projects developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 *et seq.*) must meet the procedures and criteria of 40 CFR part 51, subpart T, in lieu of the procedures set forth in this subpart.

(b) For Federal actions not covered by paragraph (a) of this section, a conformity determination is required for each pollutant where the total of direct and indirect emissions in a nonattainment or maintenance area caused by a Federal action would equal or exceed any of the rates in paragraphs (b)(1) or (2) of this section.

(1) For purposes of paragraph (b) of this section, the following rates apply in nonattainment areas (NAA's):

	Tons/ year
Ozone (VOC's or NO_X):	
Serious NAA's	50
Severe NAA's	25
Extreme NAA's	10
Other ozone NAA's outside an ozone transport region	100
Marginal and moderate NAA's inside an ozone transport region:	
VOC	50
NO_X	100
Carbon monoxide:	
All NAA's	100
SO_2 or NO_2:	
All NAA's	100
PM–10:	
Moderate NAA's	100
Serious NAA's	70
Pb:	
All NAA's	25

(2) For purposes of paragraph (b) of this section, the following rates apply in maintenance areas:

	Tons/ year
Ozone (NO_X), SO_2 or NO_2:	
All Maintenance Areas	100
Ozone (VOC's):	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon monoxide:	
All Maintenance Areas	100
PM–10:	
All Maintenance Areas	100
Pb:	
All Maintenance Areas	25

(c) The requirements of this subpart shall not apply to the following Federal actions:

(1) Actions where the total of direct and indirect emissions are below the emissions levels specified in paragraph (b) of this section.

(2) Actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:

(i) Judicial and legislative proceedings.

(ii) Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted.

(iii) Rulemaking and policy development and issuance.

(iv) Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities.

(v) Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law enforcement personnel.

(vi) Administrative actions such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties and fees.

(vii) The routine, recurring transportation of materiel and personnel.

(viii) Routine movement of mobile assets, such as ships and aircraft, in home port reassignments and stations (when no new support facilities or personnel are required) to perform as operational groups and/or for repair or overhaul.

(ix) Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site.

(x) Actions, such as the following, with respect to existing structures, properties, facilities and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands; for example, relocation of personnel, disposition of federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency.

(xi) The granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted.

(xii) Planning, studies, and provision of technical assistance.

(xiii) Routine operation of facilities, mobile assets and equipment.

(xiv) Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer.

(xv) The designation of empowerment zones, enterprise communities, or viticultural areas.

(xvi) Actions by any of the Federal banking agencies or the Federal Reserve Banks, including actions regarding charters, applications, notices, licenses, the supervision or examination of depository institutions or depository institution holding companies, access to the discount window, or the provision of financial services to banking organizations or to any department, agency or instrumentality of the United States.

(xvii) Actions by the Board of Governors of the Federal Reserve System or any Federal Reserve Bank necessary to effect monetary or exchange rate policy.

(xviii) Actions that implement a foreign affairs function of the United States.

(xix) Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of CERCLA, and where the Federal agency does not retain continuing authority to control emissions associated with the lands, facilities, title, or real properties.

(xx) Transfers of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity and assignments of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity for subsequent deeding to eligible applicants.

(xxi) Actions by the Department of the Treasury to effect fiscal policy and to exercise the borrowing authority of the United States.

(3) Actions where the emissions are not reasonably foreseeable, such as the following:

(i) Initial Outer Continental Shelf lease sales which are made on a broad scale and are followed by exploration

Table 11

Bolo Facility Emissions Summary
(3,000 TPD Scenario)

Scenario	NO_x	CO	ROG	SO_2	PM_{10}
Maximum 1-hr (lbs)					
On-Site Mobile Sources	65.3	78.9	--	--	--
On-Site Locomotives	8.5	4.0	--	--	--
Flare	41.5	157.5	--	--	--
Total	115.4	240.3	--	--	--
Maximum 24-hr (lbs)					
On-Site Mobile Sources	476.6	580.1	70.0	15.2	28.4
On-Site Locomotives	17.1	7.9	2.8	1.2	0.6
Flare	996	3780	8360	278	1394
LFG Fugitives	--	--	1512	--	--
Fugitive Dust	--	--	--	--	517.6
Total	1490	4368	9945	294.4	1941
Maximum Annual (tons)					
On-Site Mobile Sources	73.9	88.4	9.9	2.3	4.4
On-Site Locomotives	2.7	1.2	0.4	0.2	0.1
Flare	182	691	1530	50.9	254
LFG Fugitives	--	--	275.9	---	--
Fugitive Dust	--	--	--	--	91.0
Total	259	781	1820	53	350

11.2.1 UNPAVED ROADS

11.2.1.1 General

Dust plumes trailing behind vehicles traveling on unpaved roads are a familiar sight in rural areas of the United States. When a vehicle travels an unpaved road, the force of the wheels on the road surface causes pulverization of surface material. Particles are lifted and dropped from the rolling wheels, and the road surface is exposed to strong air currents in turbulent shear with the surface. The turbulent wake behind the vehicle continues to act on the road surface after the vehicle has passed.

11.2.1.2 Emissions And Correction Parameters

The quantity of dust emissions from a given segment of unpaved road varies linearly with the volume of traffic. Also, field investigations have shown that emissions depend on correction parameters (average vehicle speed, average vehicle weight, average number of wheels per vehicle, road surface texture and road surface moisture) that characterize the condition of a particular road and the associated vehicle traffic.[1-4]

Dust emissions from unpaved roads have been found to vary in direct proportion to the fraction of silt (particles smaller than 75 micrometers in diameter) in the road surface materials.[1] The silt fraction is determined by measuring the proportion of loose dry surface dust that passes a 200 mesh screen, using the ASTM-C-136 method. Table 11.2.1-1 summarizes measured silt values for industrial and rural unpaved roads.

The silt content of a rural dirt road will vary with location, and it should be measured. As a conservative approximation, the silt content of the parent soil in the area can be used. However, tests show that road silt content is normally lower than in the surrounding parent soil, because the fines are continually removed by the vehicle traffic, leaving a higher percentage of coarse particles.

Unpaved roads have a hard nonporous surface that usually dries quickly after a rainfall. The temporary reduction in emissions because of precipitation may be accounted for by not considering emissions on "wet" days (more than 0.254 millimeters [0.01 inches] of precipitation).

The following empirical expression may be used to estimate the quantity of size specific particulate emissions from an unpaved road, per vehicle kilometer traveled (VKT) or vehicle mile traveled (VMT), with a rating of A:

$$E = k(1.7) \left(\frac{s}{12}\right) \left(\frac{S}{48}\right) \left(\frac{W}{2.7}\right)^{0.7} \left(\frac{w}{4}\right)^{0.5} \left(\frac{365-p}{365}\right) \quad (\text{kg/VKT}) \qquad (1)$$

$$E = k(5.9) \left(\frac{s}{12}\right) \left(\frac{S}{30}\right) \left(\frac{W}{3}\right)^{0.7} \left(\frac{w}{4}\right)^{0.5} \left(\frac{365-p}{365}\right) \quad (\text{lb/VMT})$$

TABLE 11.2.1-1. TYPICAL SILT CONTENT VALUES OF SURFACE MATERIALS ON INDUSTRIAL AND RURAL UNPAVED ROADS[a]

Industry	Road Use Or Surface Material	Plant Sites	Test Samples	Silt (%, w/w) Range	Silt (%, w/w) Mean
Copper smelting	Plant road	1	3	[15.9 - 19.1]	[17.0]
Iron and steel production	Plant road	9	20	4.0 - 16.0	8.0
Sand and gravel processing	Plant road	1	3	[4.1 - 6.0]	[4.8]
Stone quarrying and processing	Plant road	1	5	[10.5 - 15.6]	[14.1]
Taconite mining and processing	Haul road	1	12	[3.7 - 9.7]	[5.8]
	Service road	1	8	[2.4 - 7.1]	[4.3]
Western surface coal mining	Access road	2	2	4.9 - 5.3	5.1
	Haul road	3	21	2.8 - 18	8.4
	Scraper road	3	10	7.2 - 25	17
	Haul road (freshly graded)	2	5	18 - 29	24
Rural roads	Gravel	1	1	NA	[5.0]
	Dirt	2	5	5.8 - 68	28.5
	Crushed limestone	2	8	7.7 - 13	9.6

[a] References 4 - 11. Brackets indicate silt values based on samples from only one plant site. NA = Not available.

where: E = emission factor
k = particle size multiplier (dimensionless)
s = silt content of road surface material (%)
S = mean vehicle speed, km/hr (mph)
W = mean vehicle weight, Mg (ton)
w = mean number of wheels
p = number of days with at least 0.254 mm (0.01 in.) of precipitation per year

The particle size multiplier, k, in Equation 1 varies with aerodynamic particle size range as follows:

Aerodynamic Particle Size Multiplier For Equation 1

$\leq$30 µm	$\leq$15 µm	$\leq$10 µm	$\leq$5 µm	$\leq$2.5 µm
0.80	0.50	0.36	0.20	0.095

The number of wet days per year, p, for the geographical area of interest should be determined from local climatic data. Figure 11.2.1-1 gives the geographical distribution of the mean annual number of wet days per year in the United States.

Equation 1 retains the assigned quality rating if applied within the ranges of source conditions that were tested in developing the equation, as follows:

RANGES OF SOURCE CONDITIONS FOR EQUATION 1

Equation	Road silt content (%, w/w)	Mean vehicle weight		Mean vehicle speed		Mean no. of wheels
		Mg	ton	km/hr	mph	
1	4.3 - 20	2.7 - 142	3 - 157	21 - 64	13 - 40	4 - 13

Also, to retain the quality rating of the equation applied to a specific unpaved road, it is necessary that reliable correction parameter values for the specific road in question be determined. The field and laboratory procedures for determining road surface silt content are given in Reference 4. In the event that site specific values for correction parameters cannot be obtained, the appropriate mean values from Table 11.2.1-1 may be used, but the quality rating of the equation is reduced to B.

Equation 1 was developed for calculation of annual average emissions, and thus, is to be multiplied by annual vehicle distance traveled (VDT). Annual average values for each of the correction parameters are to be substituted into

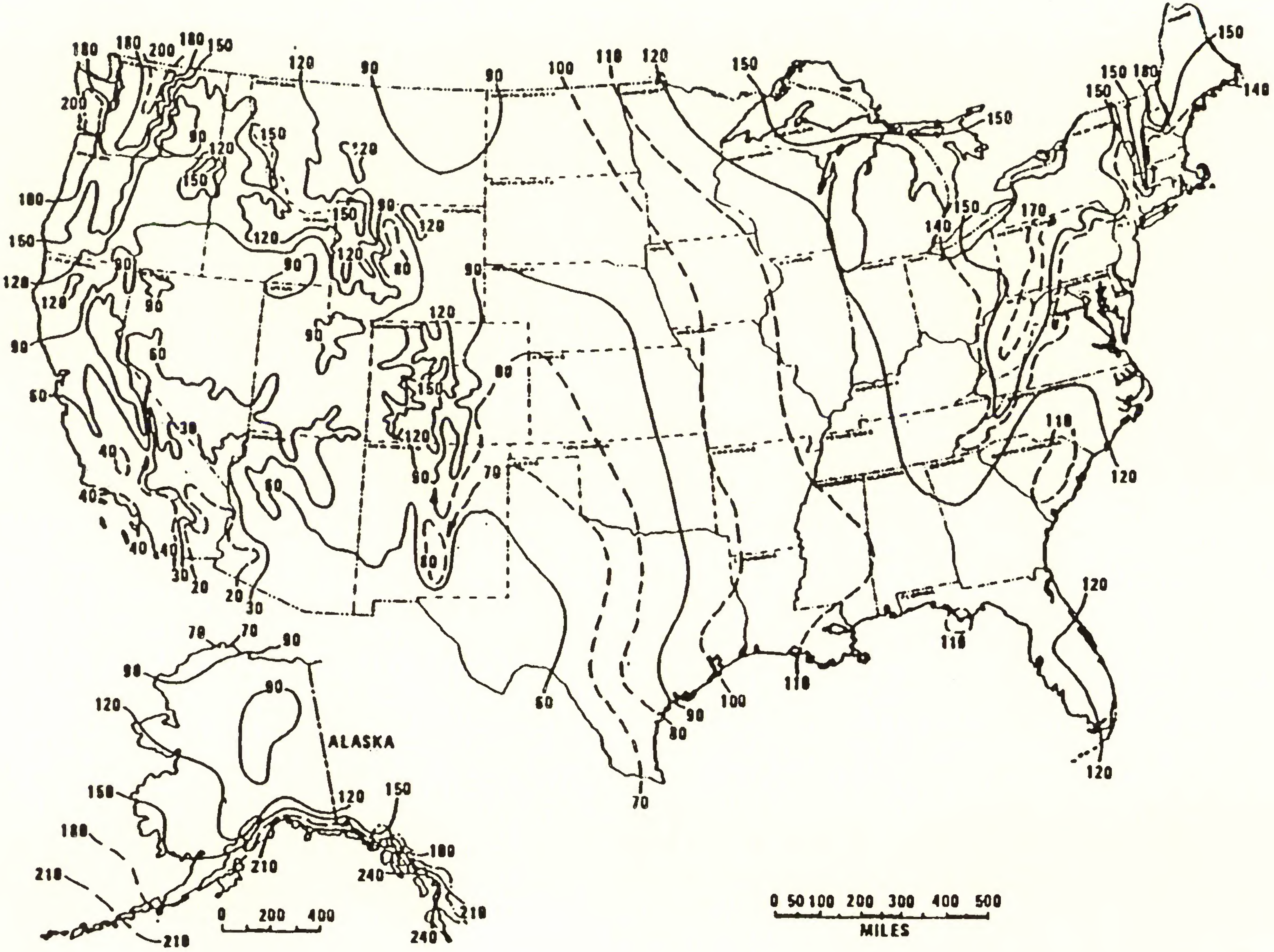


Figure 11.2.1-1. Mean number of days with 0.01 inch or more of precipitation in United States.[10]

11.2.4 Heavy Construction Operations

11.2.4.1 General – Heavy construction is a source of dust emissions that may have substantial temporary impact on local air quality. Building and road construction are the prevalent construction categories with the highest emissions potential. Emissions during the construction of a building or road are associated with land clearing, blasting, ground excavation, cut and fill operations, and the construction of the particular facility itself. Dust emissions vary substantially from day to day depending on the level of activity, the specific operations, and the prevailing weather. A large portion of the emissions result from equipment traffic over temporary roads at the construction site.

11.2.4.2 Emissions and Correction Parameters – The quantity of dust emissions from construction operations are proportional to the area of land being worked and the level of construction activity. Also, by analogy to the parameter dependence observed for other similar fugitive dust sources,[1] it is probable that emissions from heavy construction operations are directly proportional to the silt content of the soil (that is, particles smaller than 75 μm in diameter) and inversely proportional to the square of the soil moisture, as represented by Thornthwaite's precipitation-evaporation (PE) index.[2]

11.2.4.3 Emission Factor – Based on field measurements of suspended dust emissions from apartment and shopping center construction projects, an approximate emission factor for construction operations is:

1.2 tons per acre of construction per month of activity

This value applies to construction operations with: (1) medium activity level, (2) moderate silt content ($\sim$30 percent), and (3) semiarid climate (PE $\sim$50; see Figure 11.2-2). Test data are not sufficient to derive the specific dependence of dust emissions on correction parameters.

The above emission factor applies to particles less than about 30 μm in diameter, which is the effective cut-off size for the capture of construction dust by a standard high-volume filtration sampler[1], based on a particle density of 2.0-2.5 g/cm^3.

11.2.4.4 Control Methods – Watering is most often selected as a control method because water and necessary equipment are usually available at construction sites. The effectiveness of watering for control depends greatly on the frequency of application. An effective watering program (that is, twice daily watering with complete coverage) is estimated to reduce dust emissions by up to 50 percent.[3] Chemical stabilization is not effective in reducing the large portion of construction emissions caused by equipment traffic or active excavation and cut and fill operations. Chemical stabilizers are useful primarily for application on completed cuts and fills at the construction site. Wind erosion emissions from inactive portions of the construction site can be reduced by about 80 percent in this manner, but this represents a fairly minor reduction in total emissions compared with emissions occurring during a period of high activity.

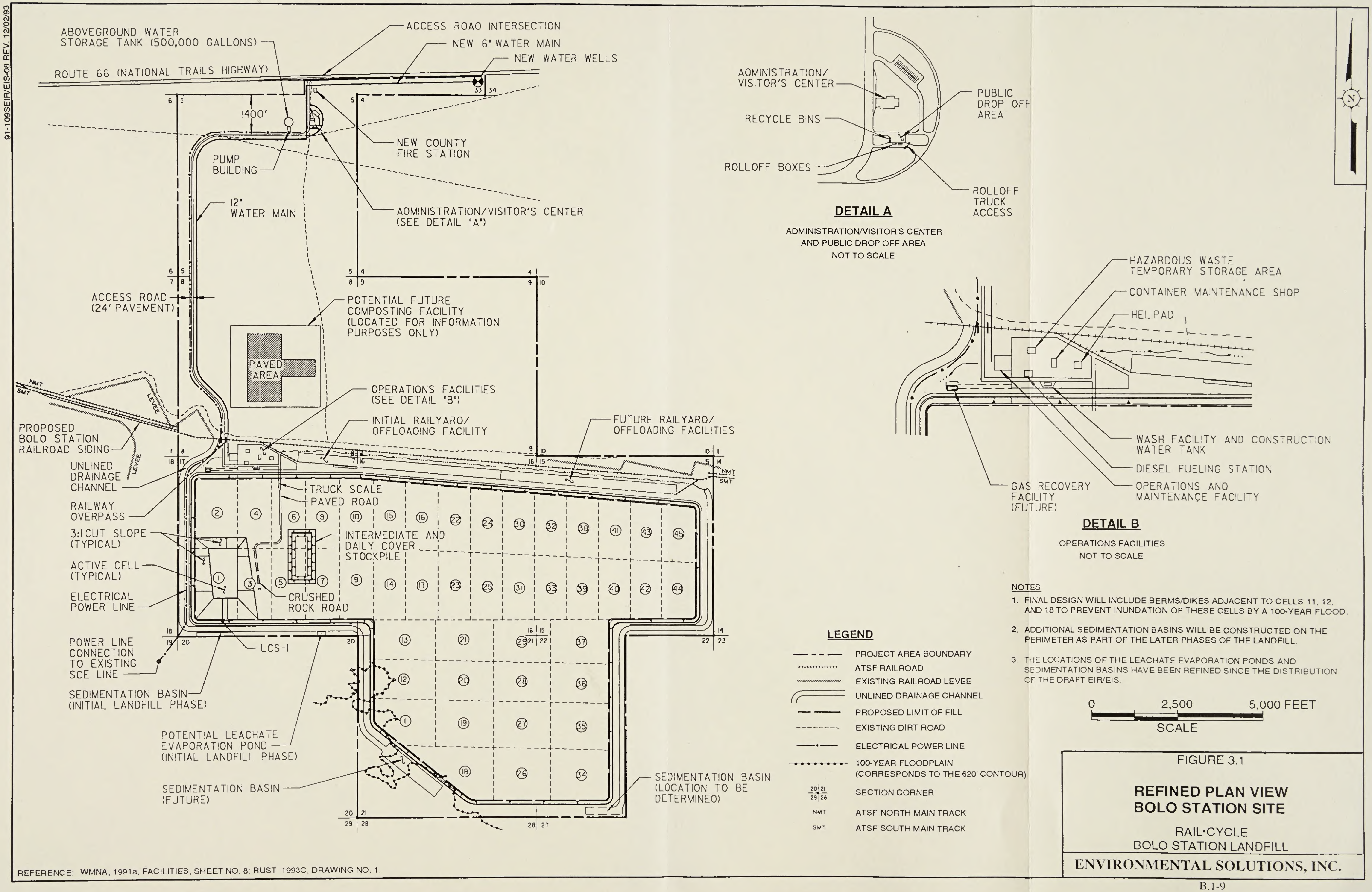
References for Section 11.2.4

1. Cowherd, C., Jr., K. Axetell, Jr., C. M. Guenther, and G. A. Jutze. Development of Emissions Factors for Fugitive Dust Sources. Midwest Research Institute, Kansas City, Mo. Prepared for Environmental Protection Agency, Research Triangle Park, N.C. under Contract No. 68-02-0619. Publication No. EPA-450/3-74-037. June 1974.

2. Thornthwaite, C. W. Climates of North America According to a New Classification. Geograph. Rev. *21*: 633-655, 1931.

3. Jutze, G. A., K. Axetell, Jr., and W. Parker. Investigation of Fugitive Dust-Sources Emissions and Control, PEDCo Environmental Specialists, Inc., Cincinnati, Ohio. Prepared for Environmental Protection Agency, Research Triangle Park, N.C. under Contract No. 68-02-0044. Publication No. EPA-450/3-74-036a. June 1974.

91-109SEIR/EIS-08 REV. 12/02/93


ABOVEGROUND WATER STORAGE TANK (500,000 GALLONS)
ACCESS ROAD INTERSECTION
NEW 6" WATER MAIN
NEW WATER WELLS
ROUTE 66 (NATIONAL TRAILS HIGHWAY)
1400'
PUMP BUILDING
NEW COUNTY FIRE STATION
12" WATER MAIN
ADMINISTRATION/VISITOR'S CENTER (SEE DETAIL "A")
ACCESS ROAD (24' PAVEMENT)
POTENTIAL FUTURE COMPOSTING FACILITY (LOCATED FOR INFORMATION PURPOSES ONLY)
PAVED AREA
OPERATIONS FACILITIES (SEE DETAIL "B")
INITIAL RAILYARD/OFFLOADING FACILITY
FUTURE RAILYARD/OFFLOADING FACILITIES
NMT
SMT
LEVEE
PROPOSED BOLO STATION RAILROAD SIDING
UNLINED DRAINAGE CHANNEL
RAILWAY OVERPASS
3:1 CUT SLOPE (TYPICAL)
ACTIVE CELL (TYPICAL)
ELECTRICAL POWER LINE
TRUCK SCALE
PAVED ROAD
INTERMEDIATE AND DAILY COVER STOCKPILE
CRUSHED ROCK ROAD
LCS-1
POWER LINE CONNECTION TO EXISTING SCE LINE
SEDIMENTATION BASIN (INITIAL LANDFILL PHASE)
POTENTIAL LEACHATE EVAPORATION POND (INITIAL LANDFILL PHASE)
SEDIMENTATION BASIN (FUTURE)
SEDIMENTATION BASIN (LOCATION TO BE DETERMINED)
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺
6 5 7 8 18 17 19 20 29 28 16 15 21 22 27 9 10 4 11 14 23 33 34
ADMINISTRATION/VISITOR'S CENTER
RECYCLE BINS
ROLLOFF BOXES
PUBLIC DROP OFF AREA
ROLLOFF TRUCK ACCESS
HAZARDOUS WASTE TEMPORARY STORAGE AREA
CONTAINER MAINTENANCE SHOP
HELIPAD
WASH FACILITY AND CONSTRUCTION WATER TANK
DIESEL FUELING STATION
OPERATIONS AND MAINTENANCE FACILITY
GAS RECOVERY FACILITY (FUTURE)
N

DETAIL A

ADMINISTRATION/VISITOR'S CENTER
AND PUBLIC DROP OFF AREA
NOT TO SCALE

DETAIL B

OPERATIONS FACILITIES
NOT TO SCALE

LEGEND

— — —	PROJECT AREA BOUNDARY
	ATSF RAILROAD
	EXISTING RAILROAD LEVEE
	UNLINED DRAINAGE CHANNEL
— —	PROPOSED LIMIT OF FILL
- - - - -	EXISTING DIRT ROAD
—·—	ELECTRICAL POWER LINE
··········	100-YEAR FLOODPLAIN (CORRESPONDS TO THE 620' CONTOUR)
20|21 29|28	SECTION CORNER
NMT	ATSF NORTH MAIN TRACK
SMT	ATSF SOUTH MAIN TRACK

NOTES

1. FINAL DESIGN WILL INCLUDE BERMS/DIKES ADJACENT TO CELLS 11, 12, AND 18 TO PREVENT INUNDATION OF THESE CELLS BY A 100-YEAR FLOOD.
2. ADDITIONAL SEDIMENTATION BASINS WILL BE CONSTRUCTED ON THE PERIMETER AS PART OF THE LATER PHASES OF THE LANDFILL.
3. THE LOCATIONS OF THE LEACHATE EVAPORATION PONDS AND SEDIMENTATION BASINS HAVE BEEN REFINED SINCE THE DISTRIBUTION OF THE DRAFT EIR/EIS.

0 2,500 5,000 FEET
SCALE

REFERENCE: WMNA, 1991a, FACILITIES, SHEET NO. 8; RUST, 1993C, DRAWING NO. 1.

FIGURE 3.1

REFINED PLAN VIEW
BOLO STATION SITE

RAIL•CYCLE
BOLO STATION LANDFILL

ENVIRONMENTAL SOLUTIONS, INC.

APPENDIX C
CALIFORNIA DEPARTMENT OF FISH AND GAME LETTER: SECTION 1600 STREAMBED ALTERATION

STATE OF CALIFORNIA—THE RESOURCES AGENCY
PETE WILSON, *Governor*

DEPARTMENT OF FISH AND GAME
330 GOLDEN SHORE, SUITE 50
LONG BEACH, CA 90802
(310)590-5137

November 18, 1993

RECEIVED
NOV 29 1993
RAIL CYCLE

Mr. Hal Cahill
Rail Cycle
5701 South Eastern Avenue
Los Angeles, CA 90040

Dear Mr. Cahill:

The Department of Fish and Game, Region 5, has reviewed the information provided for your project for the Bolo Station Landfill east of Amboy in San Bernardino County. Based on this information, the Department has determined that a Streambed Alteration Agreement under Fish and Game Code 1600 et seq. will not be required provided the following conditions are met.

1. Equipment shall not be operated in wetted areas (including but not limited to ponded, flowing, or wetland areas) without the prior written approval of the Department.

2. Flow diversions shall be done in a manner that shall prevent pollution and/or siltation from moving to downstream reaches.

3. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to wildlife, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter a stream or lake, by Operator or any party working under contract, or with the permission of the Operator, shall be removed immediately.

4. Culverts currently under the [illegible] tracks shall remain open for use as wildlife corridors.

5. Areas of disturbed soils with slopes toward a stream or lake shall be stabilized to reduce erosion potential. Planting, seeding and mulching is conditionally acceptable. Where suitable vegetation cannot reasonably expected to become established, non-erodible materials shall be used for such stabilization.

If the Operator's work changes from that stated in the notification, an agreement may be needed a new notification shall be submitted to the Department of Fish and Game. Failure to comply with the above conditions or with other pertinent code sections, including but not limited to Fish and Game Code

Sections 5650, 5652, 5937, and 5948, may result in prosecution.

If your proposed project changes from the so as to divert or obstruct the natural flow or change the bed, channel or bank of any river, stream or lake, or will use any material from the streambeds, you must first notify the Department, in writing, and then comply with Fish and Game Code 1600 et seq., prior to initiating any activities, or you will be in violation of Fish and Game Code 1600 et. seq and will be subject to prosecution.

If you have any questions, please contact me at (805)538-1464 or our Environmental Services office at (310)590-5137.

Sincerely,

Rebecca Jones

Rebecca Jones
Environmental Specialist III
Region 5

APPENDIX D
SAN BERNARDINO COUNTY GEOLOGIST MEMORANDUM: CONCURRENCE WITH GEOLOGIC REVIEW

INTEROFFICE MEMO

DATE May 6, 1994

PHONE (909) 387-4240
MAIL CODE 0181

FROM WES REEDER, County Geologist
Building and Safety Department

TO RANDY SCOTT, Senior Planner
Planning Department

SUBJECT EVALUATION OF LINEAMENT 'A', RAIL CYCLE BOLO STATION LANDFILL

The following report prepared by Gary S. Rasmussen & Associates, Inc. dated March 31, 1994 was submitted as additional information to be incorporated into the final EIR.

> Analysis of Geologic Issues Related to Seismic Risk on the Proposed Rail Cycle Bolo Station Landfill Near Amboy, California, Project No. 3197.1.

The report specifically addresses Lineament 'A', a surface feature located approximately 1 mile south of the southwest corner of the landfill site. The report concludes that Lineament 'A' is probably related to subsidence and is not an old shoreline feature as stated in the draft EIR. The report also indicates that Lineament 'A' is not an active fault and does not pose a seismic risk to the site. In addition, the report states that in the opinion of the consulting geologist, no active faults exist on the site of the proposed landfill.

Since the additional evaluation represents only a qualitative analysis, I recommend that the following mitigation be incorporated into the final EIR.

> No waste disposal will take place in any cell until a subsurface geologic investigation has confirmed that the cell is free of Holocene faulting. The subsurface investigation may consist of geologic logging of cell walls during cell excavation. The geologic report will be prepared by a California Registered Geologist and will be submitted to the San Bernardino County Geologist and the Colorado River Basin Regional Water Board for review and approval. Should active faulting be encountered, appropriate setbacks will be recommended and if necessary, the cell(s) will be reconfigured within the approved limits of the landfill.

WR:ljg

cc: Aileen Deardorf, Planning Department

GARY S. RASMUSSEN & ASSOCIATES, INC. / *ENGINEERING GEOLOGY*

1811 COMMERCENTER WEST • SAN BERNARDINO, CALIFORNIA 92408 • (909) 888-2422 • FAX (909) 888-6806

ANALYSIS OF GEOLOGIC ISSUES RELATED TO SEISMIC RISK ON THE PROPOSED RAIL•CYCLE BOLO STATION LANDFILL NEAR AMBOY, CALIFORNIA

March 31, 1994

Project No. 3197.1

Prepared For

Waste Management, Inc.- West
18500 Von Karmon Avenue, Suite 900
Irvine, California 92715

GARY S. RASMUSSEN & ASSOCIATES, INC. / ENGINEERING GEOLOGY

1811 COMMERCENTER WEST • SAN BERNARDINO, CALIFORNIA 92408 • (909) 888-2422 • FAX (909) 888-6806

March 31, 1994

Waste Management, Inc.- West
18500 Von Karmon Avenue, Suite 900
Irvine, California 92715

Project No. 3197.1

Attention: Glen Odell

Subject: Analysis of Geologic Issues Related to Seismic Risk on the Proposed Rail•Cycle Bolo Station Landfill Near Amboy, California.

In accordance with your request, we have reviewed the Draft EIR, Supplement to the Draft EIR and supporting documents for the proposed Bolo Station landfill in San Bernardino County. The purpose of our analysis was to provide an independent review of geologic work conducted for the site with regard to seismic risk. In addition to reviewing the EIR documents and supporting reports, we carefully observed stereoscopic black and white aerial photographs flown in 1990 at a scale of 1 inch equals 600 feet and conducted a geologic site reconnaissance.

COMMENTS ON DRAFT EIR/EIS

The geologic analysis with respect to seismic issues appears to have been well done and well documented in the Draft EIR/EIS statement; however, there are a few items we would like to discuss.

On page 4.2-11, the Draft EIR states "inactive faults are those which have not shown surface displacement within the Quaternary period." Special Publication 42 of the Division of Mines and Geology (DMG) on Alquist-Priolo Earthquake Fault Zones provides definitions for faults. Their definitions are "an active fault is defined by the State Mining and Geology Board as one which has had surface displacement within Holocene time (about the last 11,000 years." Faults were defined as potentially active if they showed evidence of surface displacement during Quaternary time (last 1.6 million years, Figure 2). They further stated: "A fault may be presumed to be inactive based on satisfactory geologic evidence." No other definition of inactive faults is given. Certain Quaternary (i.e. Pleistocene) faults are presumed to be inactive based on direct geologic evidence of inactivity during all of Holocene time or longer. In summary, a potentially active fault is one upon which sufficient evidence is not known and it is only known that the fault cuts materials 1.6 million years old or younger (can include Holocene). An active fault is one that cuts materials 11,000 years or younger. Therefore, potentially active faults can include both inactive and active faults. Although this is a fine detail, it becomes critical in evaluating the existence of active faults on a potential landfill site in accordance with State law. The statement "inactive faults are those which have not shown surface displacement within the Quaternary period" as stated in the EIR is technically correct; however, the further implication is generally that inactive faults are faults that can be clearly shown to not displace Holocene (last 11,000 years) materials.

Along those same lines, the statement on page 4.2-21 that "no active or potentially active faults have been mapped within 20 miles of the site, ..." is technically not correct as the potentially active Ludlow fault is located within 15 miles north-northwest of the site and is considered to be potentially active, based on offset of Pleistocene-age alluvium along its southern reach. Similarly, the Bristol Mountain fault can be considered to be potentially active based on offset of lower Pleistocene materials (1.6 millions year old) by Dokka (1983). However, it can be further classified as not active, as it does not offset materials younger than lower Pleistocene (i.e. does not offset upper Pleistocene or Holocene materials).

SUPPLEMENT TO THE DRAFT EIR/EIS

Based on further geologic studies, the Supplement to the Draft EIR states that "there is no evidence of site faulting, active or otherwise (Jacobs, 1990; 1991)". We concur with this analysis and could find no evidence of faulting on the site. Most of the site is covered by Pleistocene sediments, except for the extreme southerly portion of

Sections 21 and 22, which contains Holocene sediments at the surface. However, no evidence of faulting was observed anywhere on site, regardless of age of materials.

On page 4.1-3, the Supplement to the Draft EIR states: "There are three inactive faults located within 6 to 24 miles of the site (Broadwell Lake, Bristol Mountains and Ludlow faults, respectively). They were considered for purposes of landfill engineering and design by Rail•Cycle (Jacobs, 1991)." Both the Broadwell Lake and Bristol Mountains fault can be considered to be inactive as they do not displace late Pleistocene sediments (Ford *et al.*, 1989). Similar evidence indicating lack of activity on the Ludlow fault during late Pleistocene time has not been brought forth; therefore, it should be considered to remain a potentially active fault under the State's definitions.

Based on maps by the California Division of Mines and Geology, the Bristol Mountains fault is considered to be not active as stated in the supplement. However, in his compilation of Quaternary faults, Wesnousky (1986) shows a slip rate of 0.3 to 3mm per year for this fault based on Dokka (1983). Referring to the original paper by Dokka reveals that he only refers to the Bristol Mountains fault as cutting lower (oldest) Pleistocene sediments. Wesnousky apparently took the total slip across the Bristol Mountains fault reported by Dokka and applied a slip-rate throughout the entire Quaternary time, including Holocene, whereas Dokka's statement only includes movement up to the lower, or early Pleistocene, time. Dokka's subsequent statements clearly indicate that no Holocene movement has been found on the Broadwell Lake or Bristol Mountains faults during Holocene time and, in fact, are capped by unbroken Pleistocene sediments. Therefore, Wesnousky's interpretation of a slip rate on the Bristol Mountains fault is in conflict with the paper he uses as a basis for total slip over the length of the fault and the time period where the slip took place (ended in early Pleistocene). Therefore, the Bristol Mountains fault is considered to be not active in accordance with DMG definitions.

On page 4.1-3 with regard to lineament "A", the Supplement states: "Based on subsequent investigation discussed in the following section, it was concluded that this lineament is most likely a shoreline feature and not related to faulting." Based on our observation of lineament "A" in the field, on review of aerial photographs and review of published documents, it is our opinion that lineament "A" is not a shoreline feature. This is supported by lack of evidence of any other shoreline features in the area and published data indicating there are no shoreline features associated with Bristol Lake (Brown, 1989).

A significant amount of time and effort was expended by previous workers on lineament 'A', which is located approximately 1 mile south of the southwesterly portion of the site. The Supplement to the Draft EIR goes into some detail with regard to geophysical surveys and trenching conducted, along with geologic mapping, to evaluate the potential for lineament 'A' to be fault related and the potential for the lineament to extend to the site. Because of this, it is appropriate to discuss, at some length, the issues regarding lineament 'A' and the proposed use of the site.

LINEAMENT 'A'

Lineament 'A' was identified in the Jacobs Engineering Group Phase II geologic study conducted in 1991 as a north-south lineament located approximately 1 mile south of the southwest corner of the proposed landfill, and extending for a distance of approximately 1 mile farther to the south from there. In addition, they mapped several ground fissures parallel to, and subparallel to, this feature, west of the lineament. Lineaments observed on aerial photographs can be caused by many things, including, but not limited to, cultural features such as roads, utility lines; photogrammatic and photoprocessing anomalies, including scratched film or old chemicals; and geologic phenomena such as fissures, shorelines, bedding units, differential contacts between differing geologic units, surface faults, buried faults and buried ridges. Based on review of the documents and our field reconnaissance, we make the following observations and conclusions.

Observation of the aerial photographs indicates that the lineament occurs along an area that appears to have been dropped down on the west side or slightly elevated along the east side. Field observation indicates the west side has been dropped down approximately one foot. The lineament has not been mapped as far north as the site and our field reconnaissance indicates that, indeed, it does not continue to the site.

The possibility that lineament 'A' is a fault or is fault-related is important as it could impact the proposed landfill if it is a fault and if it were to propagate to the north.

Based on our field and aerial photograph observations, lineament 'A' is not a Holocene fault (active fault) and does not have the typical characteristics of either strike-slip, normal or thrust faulting. Our observations of this feature suggest it is probably a pre-Holocene feature but latest Pleistocene (probably within the past 15,000 years). The evidence for the feature not being an active fault are as follows:

1) There is no horizontal offset of any of the young or old drainages crossing the feature, indicating a lack of strike-slip movement.

2) Strike-slip faulting is the normal type of faulting in the Mojave Desert in this region and is the only type of faulting that results in a straight-line type fault. Normal faults usually have scalloped (concave) features associated with them and thrust faults usually have a convex pattern associated with them. The lack of horizontal offset of any of the natural drainages and stream banks that cross the lineament rule out it being a strike-slip fault.

3) Geomorphically mature drainages flowing to the west have been created by the origination of lineament 'A'. The creation of the lineament resulted in younger

drainages being developed on the eastern block that have subsequently flowed across the lineament toward the west. Older, pre-existing drainages also exist in several places that were there prior to creation of the lineament. Both the younger drainages and the older, pre-existing drainages have attained an equilibrium base level and do not have any change in stream gradient across the lineament. This suggests that this feature was created a long time ago, at least thousands of years and probably prior to Holocene time (11,000 years). It has been our experience that active faults always change stream gradients when they cross drainages in southern California.

4) The pre-existing drainages are inactive with additional second- and third-order drainages. They have very rounded and relatively flat stream banks, all indicating a high degree of maturity (age). The younger drainages also exhibit significant maturity by their second-order drainages entering them and the flat stream banks, particularly where these drainages cross the lineament. If the lineament had moved in the past several thousand years, one would expect a change in base level with a resulting change in the stream gradients, with resultant steep-sided drainages where these upstream drainage banks cross the lineament.

5) The west-facing scarp of the lineament itself is very flat. Again, if this is a fault scarp, it is a very mature (old) fault scarp, as the steepness or inclination of a fault scarp is directly related to the time of last movement.

6) There are many other parallel and subparallel lineaments both to the west and east of lineament 'A' that are, in most cases, much shorter, many of which trend at shallow angles to the lineament.

7) Lineament 'A' is fairly linear, except at the north and south ends, where it becomes much more sinuous, suggesting it does not continue much farther to either the north or south.

8) At the north end of lineament 'A', the last clearly visible expression on the photographs is a northeast-trending feature along a drainage. Three fissures almost begin at the northern end of lineament 'A'. These fissures may be connected with lineament 'A' at depth.

9) These fissures have a typical subsidence, fluid- withdrawal appearance. There was evidence that at least one of these fissures had previous episodes of fissuring. The fissures progressively step or migrate toward the west-northwest along their northern extent. If the fissures are connected to lineament 'A' at depth, their trend is away from the site (north-northwest trend) the farther north one goes from the northerly limit of lineament 'A'. These fissures are more than 1/2 mile south-southwest of the site.

10) Nearly all of the active faults in the vicinity of the proposed landfill are located many miles to the west-southwest of the site. Nearly all of these active faults trend northwest-southeast and in areas where Holocene activity is apparent, the evidence for active faulting is well preserved due to the lack of rainfall and lack of vegetation in the desert environment. Lineament 'A' trends north-south, at an angle to this trend, and is very limited in length, only encompassing approximately 1 mile in total length.

11) Active faults are generally seismogenic sources capable of producing earthquakes whose point of origin generally starts 8 to 10 miles beneath the surface. It would be nearly impossible for an earthquake originating at this depth to propagate to the surface and only result in a fault length of 1 mile.

Based on review of the documents and our above observations, it is our opinion that lineament 'A' is not an active fault and, in fact, is not likely a tectonic fault at all.

Other Origins for Lineament 'A'

As stated previously, lineaments can be many things. However, lineament 'A' has surface expression in the field and, together with our analysis of the aerial photographs, it appears that this lineament may be controlled at depth by some sort of geologic structure due to the linearity of the feature. As discussed above, it does not appear that this lineament is a fault.

Fissures produce lineaments. Ground fissures can occur and cause lineaments similar to that observed for lineament 'A'. Many of these fissures, particularly in the Arizona area where ground-water withdrawal and overdraft have been particularly significant have resulted in graben-like structures caused by subsidence from ground-water withdrawal. Similar features can occur without ground-water withdrawal by man, but because of changing climates and environments through geologic time.

Fissures can also be created by earthquake-induced ground failure, i.e. the deeper sediments associated with Bristol Lake may compact and densify during seismic shaking in the area, resulting in differential consolidation that propagates to the surface. A north-south-trending ridge at depth under lineament 'A' could exacerbate or enhance any differential compaction as well as could result in differential ground response during earthquakes, resulting in a lineament over a buried bedrock ridge. The north-south trend of mountains and ridges south and east of the site suggest this is a possibility here also.

Desiccation or drying of playa or lake bed clays can also result in fissures, many of which can be linear for significant distances, depending upon the size of the clay body.

Limestones and dolomites are prevalent in most of the mountain ranges in the vicinity. Dissolution of these materials at depth could result in cavities which could result in a lineament near the surface.

Differential compaction or hydrocompaction of the natural sediments without earthquake shaking can also occur and result in lineaments.

Regional geologic forces such as compression or extension can result in fissures or lineaments in various types of materials, including sediments, such as occur near lineament 'A'.

Conclusions Regarding Lineament 'A'

Based on our observation of the aerial photographs, review of the documents, field reconnaissance of fissures and lineament 'A', the above evidence and our experience, it is our conclusion that lineament 'A' is related to subsidence of the area west of lineament 'A'. Lineament 'A' is an old feature, with our best estimate being approximately 12,000 years ago as the time of origin of lineament 'A'. Lineament 'A' should have no impact on the proposed landfill from a seismic risk or surface fault ground rupture hazard.

Worst Case

For discussion purposes, if one assumes the worst case scenario, that lineament 'A' is an active fault and exists farther north, what would be the consequences with respect to the proposed landfill? If lineament 'A' was a fault and continued in the subsurface to the north under the site, then potential movement from an earthquake along the fault could result in surface ground rupture. Based on this scenario, current state law requires landfills to be set back 200 feet on either side of an active fault. The materials underlying the landfill have been shown to be Pleistocene in age, for the most part; therefore, excavation of any of the cells in the southwesterly portion of the site would be excavated well into the Pleistocene sediments. Observation of the walls of the cells as they are being excavated would reveal the presence or absence of not only Holocene faulting, but also late Pleistocene faulting. If faulting were found during excavation of any cells in Section 17, the fault could be precisely located and set back from in accordance with current law. Due to the large area available to the landfill (4,800 acres) a swath of land approximately 500 feet in width restricted from being used by the landfill would have no impact other than not placing the landfill across this restricted zone. Therefore, under the worst case scenario of lineament 'A' being an active fault, the potential hazard to the landfill can be easily mitigated.

Another factor that needs to be considered if lineament 'A' is an active fault is its potential as a source for a potentially damaging earthquake. Numerous relationships have been published regarding the length of a fault and the potential size of earthquake that would be necessary to generate a fault of that length or surface rupture of that length. These relationships have a cut-off point of M5.5, indicating not enough data exists for short-length faults and magnitudes. However, based on extrapolating these fault length-magnitude relationships, assuming a fault length of 2 kilometers along lineament 'A', the maximum size earthquake that would be anticipated, should lineament 'A' be a fault, would be expected to be less than a M4.5event. The average earthquake expected at random in the region is considered to be M4.0. Therefore, even if the fault were capable of seismogenic rupture, it would not produce accelerations greater than currently anticipated for the site from other more distant sources. However, because of its short length, it is unlikely that it could be capable of producing a seismogenic earthquake.

As reported in the Supplement to the Draft EIR, extensive geophysical studies and additional mapping were conducted. The seismic reflection data tends to support the absence of Holocene faults on the site. The excavation of four trenches on the site revealed the age of the materials but was insufficient to conclusively determine if lineament 'A' extends to the site from the south. It should be pointed out that the trench locations shown on figure 4.1.1 of the Supplement do not indicate the east-west orientation of the trenches. The incorrectly depicted north-south trenches were actually excavated in an east-west direction which was optimal for picking up features in a north-south orientation (lineament 'A'). It should also be noted that no other geologic phenomena commonly observed in trenches in Pleistocene-age materials, such as ground fracturing, caliche-filled fractures, evidence of differential ground water movement or barriers or perched, wet zones, or any disturbance of sediments commonly found in close proximity to active faults, were noted on the logs to the trench.

RECENT EARTHQUAKES

The Supplement to the Draft EIR discusses recent earthquake activity. However, the documents were prepared prior to the January 17, 1994, Northridge earthquake. The significant aspect of the Northridge earthquake was the extremely high accelerations recorded in the Los Angeles basin. Therefore, comparison of the Northridge earthquake geologic setting with that of the site deserves some comment. The Northridge earthquake occurred on a south-dipping thrust fault. Attenuation relationships and recorded accelerations associated with thrust faults results in higher accelerations than for the same size earthquake on a strike-slip or normal fault. Some attenuation relationships, such as Campbell, take this into account and suggest multiplying the accelerations by a factor if it is on the upthrown block of a thrust plate. Using this factor, the accelerations from the Northridge earthquake are not significantly higher than would be expected for an upthrown block of a thrust fault.

All of the faults in the region of the Rail•Cycle Bolo station are considered to be strike-slip faults or normal faults. No Quaternary thrust faults have been mapped in the general region. Therefore, the higher accelerations that are associated with thrust faulting are not anticipated to affect the site. In addition, there are no blind thrusts mapped or known in the Mojave Desert Block. Therefore, the ground shaking parameters delineated in the Draft EIR and Supplement to the Draft EIR are still considered to be appropriate for the site and no adjustment needs to be made based on the Northridge earthquake.

CONCLUSIONS

Based on our observations and field study, along with the documents supporting the EIR and the Supplement to the Draft EIR, it is our opinion that no active faults exist on the proposed Rail•Cycle Bolo station landfill site.

Lineament 'A' is not an active fault and the geologic characteristics observed in the field and on the aerial photographs associated with lineament 'A' best fit a model related to subsidence as being the cause for the lineament. This lineament is considered to be a quite old feature, probably pre-Holocene in age.

Fissures north and northwest of lineament 'A' are young features and may propagate farther south to lineament 'A' at some future time if fluids are continued to be withdrawn from the basin west of these lineaments. These fissures may connect with lineament 'A' at depth. Future fissures propagating to the south might result in future fissuring of lineament 'A'.

The fissures step toward the west, north of lineament 'A', and if connected with lineament 'A' would be trending away from the southwest corner of the site.

The seismic analysis, including ground shaking and ground rupture of the site as described in the Draft EIR and Supplement to the Draft EIR, together with information described in this report, are considered to adequately describe the seismic risk to the site.

If concern still exists with respect to lineament 'A' extending under the extreme southwest portion of the site in the subsurface, the potential impacts of any structural features associated with lineament 'A' affecting the site can be easily mitigated by carefully observing and logging an east-west excavation of the first cell(s) of the site in the extreme southwestern portion. If any evidence of Holocene faulting is found at that time, setbacks of 200 feet can be recommended and easily adhered to without adversely affecting the landfill, other than creating a swath 400 to 500 feet wide through the landfill that would be restricted from placement of trash. This zone could be filled with earth or could have open space with accompanying fill slopes beginning at the setback lines.

Even if lineament 'A' is a fault, it is considered to be a secondary feature and not capable of generating an earthquake due to its extremely short length. However, even if it could generate an earthquake, the ground motions would be no higher, based on the fault length, than is anticipated from more distant earthquake sources because of the small size of earthquake that could be generated.

Please contact us if you have any questions.

Respectfully submitted,

GARY S. RASMUSSEN & ASSOCIATES, INC.

Gary S. Rasmussen
Engineering Geologist, EG 925

GSR/pg

Distribution: Waste Management, Inc.- West (6)
County of San Bernardino (2)

REFERENCES
PROJECT NO. 3197.1

Brown, W.J., 1989, An attempt to destroy the myth of a mid-late Pleistocene connection between Death Valley and the Colorado River: Evidence from Silver-Soda and Bristol Dry Lake Basins, California, *in* Geological Society of America, Abstracts with Program, Cordilleran Section, 85th Annual Meeting, Rocky Mountain Section, 42nd Annual Meeting

Dokka, R.K., 1983, Displacements on late Cenozoic strike-slip faults of the central Mojave Desert, California, *in* Geology, v. 11, pp. 305-308.

Ford, J.P., Crippen, R.E., Blom, R.G., and Dokka, R.K., 1989, Neogene strike-slip faults related by enhanced Landsat TM images in the Mojave Desert, California, *in* Geological Society of America, Abstracts with Programs, Cordilleran Section, 85th Annual Meeting, Rocky Mountain Section, 42nd Annual Meeting.

Jacobs Engineering Group, Inc., 1990, Phase I: Geology, hydrogeology, and hydrology site characterzation study, Bolo Station Facilties.

Jacobs Engineering Group, Inc., 1991, Draft Phase II: Geologic, hyudrogeologic and geotechnical site characterization study, vol. I.

Jacobs Engineering Group, Inc., 1993, Geophysical field exploration report, Bolo Station Facilities, San Bernardino County.

Wesnousky, S.G., 1986, Earthquakes, Quaternary faults, and seismic hazard in California: Journal of Geophysical Research, v. 91, pp. 12,587-12,631.

APPENDIX E
GEOLOGIC AND SEISMIC REFERENCES AND OVERVIEW TABLE

APPENDIX E.1

GEOLOGIC AND SEISMIC REFERENCES

TABLE E.1

GEOLOGIC AND SEISMIC REFERENCES

Bassett, A.M., D.H. Kupfer, and F.C. Barstow. *Core Logs From Bristol, Cadiz and Darby Dry Lakes, San Bernardino County, California.* U.S. Geological Survey Bulletin 1045-D. 1959.

Carr, W. J. *A Contribution to the Structural History of the Vidal-Parker Region, California and Arizona.* U.S. Geological Survey Professional Paper 1430. 1991.

California Division of Mines and Geology (CDMG). *Geologic Map of California.* Needle Sheet. 1963.

CDMG. *Geologic Map of California.* San Bernardino Sheet. 1967.

CDMG. *Fault Map of California.* 1975.

CDMG. *Fault and Geologic Maps of California.* Bulletin 201. 1985.

CDMG. *Summary Report: Fault Evaluation Program, 1986-1987, Mojave Desert and Other Areas.* Open-File Report 88-1. 1988.

CDMG. *Preliminary Fault Activity Map of California.* Open-File Report 92-03. 1992.

Environmental Solutions, Inc. *Draft Environmental Impact Report/Environmental Impact Statement, Rail•Cycle-Bolo Station Landfill*. Prepared for the County of San Bernardino and U.S. Department of the Interior, Bureau of Land Management. 1992.

Environmental Solutions, Inc. *Supplement to Draft Environmental Impact Report/Environmental Impact Statement, Rail•Cycle-Bolo Station Landfill.* Prepared for the County of San Bernardino and U.S. Department of the Interior, Bureau of Land Management. 1993.

Gardner, D.L. *The Barstow-Bristol Trough, Central Mojave Desert, California.* In Fife, D.L., and Brown, A.R. (eds). *Geology and Mineral Wealth of the California Desert.* South Coast Geological Society, Santa Ana, California, p. 204-214. 1980.

Glazner, A.F., G.L. Farmer, W.T. Hughes, J.L. Wooden, and W. Pickthorn. *Contamination of Basaltic Magma by Mafic Crust at Amboy and Pisgah Craters, Mojave Desert, California.* Journal of Geophysical Research, v. 96, No. B8, p.13, 673-13, 691. 1991.

Groter, S.K. *Southern California Earthquake.* U.S. Geological Survey Open-File Report 92-533. 1992.

Hart, E.W. *Fault-Rupture Hazard Zone in California.* California Division Mines and Geology Special Publication 42. 1990.

Howard, K.A. and D.M. Miller. *Late Cenozoic Faulting at the Boundary Between the Mojave and Sonoran Blocks: Bristol Lake Area, California,* in Richard, Stephen M. (ed), *Deformation Associated with Neogene Eastern California Shear Zone, Southeastern California and Southwestern Arizona,* San Bernardino County Museums Special Publication 92-1. 1992.

Jacobs Engineering Group. *Phase II Geologic, Hydrogeologic, and Geotechnical Site Characterization Study, Bolo Station Facilities, San Bernardino County.* Prepared for Rail•Cycle. 1991.

TABLE E.1

GEOLOGIC AND SEISMIC REFERENCES
(Continued)

Jacobs Engineering Group. *Geologic Mapping Southeast Bristol Mountain, San Bernardino County.* Prepared for Rail•Cycle. 1992.

Jacobs Engineering Group. *Geophysical Survey Report, Bolo Station Facilities, San Bernardino County.* Prepared for Rail•Cycle. 1993a.

Jacobs Engineering Group. *Geophysical Field Exploration Report, Bolo Station Facilities, San Bernardino County.* Prepared for Rail•Cycle. 1993b.

Karlstrom, K.E., C.F. Miller, J.A. Kingsbury, and J.L. Wooden. *Pluton Emplacement Along an Active Ductile Thrust Zone, Piute Mountains, Southeastern California: Interaction Between Deformational and Solidification Processes.* Geological Society of America Bulletin, v. 105, p. 213-230. 1993.

LaMoreaux, P.E. and Associates. *Hydrogeologic Evaluation of the Bolo Station Landfill Site, San Bernardino County, California.* April 11, 1994.

McFadden, L.D., S.G. Wells, and M.J. Jercinovich. *Influences of Eolian and Pedogenic Process on the Origin and Evolution of Desert Pavements.* Geology, June 1987, vol. 15, p. 504 to 508, Geological Society of America, Boulder, Colorado. 1987.

Miller, D.M., K.A. Howard and B.E. John. *Preliminary Geology of the Bristol Lake Region, Mojave Desert, California,* in Cooper, J.D., Compiler, *Geologic Excursions in the Mojave Desert.* Volume and Guidebook: Geological Society of America Cordilleran Section 78th Annual Meeting, California State University, Fullerton, p 91-100. 1982.

Miller, D.M. *Cenozoic Deposits in the Lava Hills and Southern Bristol Mountains, Southeastern California*, in Sherrod & Nielson (eds.). *Testing Stratigraphy of Highly Extended Terrains, California, Arizona, and Nevada.* U.S. Geological Survey Bulletin 2053. 1993.

NeSmith, C. *Comments on the Rail•Cycle Bolo Station Mega-Landfill Report of Water Discharge.* In-House Memorandum State Water Resource Control Board. 1993.

Purcell, C. and D.G. Miller. *Grabens Along the Lower Colorado River, California and Arizona,* in Fife, D.L. and Brown, A.R. *Geology and Mineral Wealth of the California Desert.* South Coast Geological Society, p. 475-484, Santa Ana, CA. 1980.

Parker, R.B. *Recent Volcanism At Amboy Crater, San Bernardino County, California.* Division of Mines and Geology Special Report 76. 1963.

Parsons, J.M. *Rail•Cycle's Proposed Bolo Station Mega-Landfill Near Amboy, San Bernardino County, October 16, 1992 Inspection of Trenches.* In-House Memorandum of State Water Resources Control Board. 1992.

Rasmussen, G.S. and Associates. *Analysis of Geologic Issues Related to Seismic Risk on The Proposed Rail•Cycle Bolo Station Landfill Near Amboy, California.* March 31, 1994.

TABLE E.1

GEOLOGIC AND SEISMIC REFERENCES
(Continued)

Rosen, R.R. *Sedimentologic, Geochemical, and Hydrologic Evolution of an Intracontinental, Closed-Basin Playa (Bristol Dry Lake, California): A Model for Playa Development and Its Implications for Paleoclimate*. Ph.D. Dissertation, University of Texas, Austin, Texas. May 1989.

Rust Environmental and Infrastructure, Inc. *Evaluation of Potential Commercial Mineral Deposits Associated with the Bureau of Land Management's Request at Bolo Station Landfill, Amboy, California.* June 1933.

Rust Environmental and Infrastructure, Inc. *Stability Analysis, Bolo Station Landfill.* November 22, 1993.

Wensnousky, S.G. *Earthquake, Quaternary Faults, and Seismic Hazards in California.* Journal of Geophysical Research, v. 91, p. 12587-12631.

APPENDIX E.2

OVERVIEW TABLE

TABLE E.2

SUMMARY
REVIEW OF VICINITY FAULTING
BOLO LANDFILL

FAULTS	DISTANCE AND DIRECTION FROM SITE	LENGTH OF FAULT (mapped)	DESCRIPTION OF FAULT AND/OR FAULT PLANE	ROCK UNITS AFFECTED	DESCRIPTION OF DEFORMATION	AGE OF YOUNGEST UNIT OFFSET	ACTIVITY STATUS
Bristol Lake Lineament	≈ 7 miles southwest	16 miles.(1)	Radar imaged, strikes northwest across playa, due to settlement, cannot be traced into late Pleistocene basalt.(1)	Holocene lake sediments.	Unknown.	Holocene, possibly.	Significance obscure.(1)
Bristol Lake Sediments	≈ 5 miles southwest	Unknown.(1)	Sediments underlying a 3,700,000 year old ash bed are deformed.(1) Growth of tectonically induced fault strikes through central portion of basin; below depth of 370 m (CAES#2) beds are tilted 60°; above this depth beds are horizontal; dated tepra indicates deformation from about 2.0 to 2.5 million years ago (Upper Pliocene).	≈ Early Pliocene.(1)	Sediments inclined, and an increase to rate of sedimentation.(1)(2)	Early Pliocene.(1) Late Pliocene.(2)	Basin subsidence continues to present day.(1) Deformation of beds ceased by Late Pleistocene.(2)
Cadiz Valley	≈ 16 miles southeast	Unknown.	Lake bed sediments below 80 m with slickensided surface dipping 60°.(1)	Lower Quaternary (Pleistocene).(1)	Sediments above slickensided surface are horizontal while those below are dipping.(1)	Pleistocene, possibly.(1) Age of undeformed geologic unit overlying trace not identified.	Significance obscure.
Calumet	11 miles of several discontinuous breaks, south.	11 miles.(3)	Fault dips 45° to 55° northeast in bedrock, strikes northwest. Lower Pleistocene alluvium overlying fault trace dips at 25°.(1)	Lower Pleistocene and older.	Dip slip movement to explain bedrock outcrops.(1)	Lower Pleistocene is deformed.	Early/Late Pleistocene for end of deformation.(1) Pre-Quaternary (before 1,600,000 years).(4) Pre-Holocene faulting.(5)
Dry Lake	20 miles south(6)	31 miles(1)(3) of discontinuous breaks seen in bedrock.	Several (en echelon) steeply east dipping, northwest strike, west dextral (right) offsetting. One fault with 80° southwest dip cuts sandstone of probable early Pleistocene age, overlying late Pleistocene alluvium is unbroken.	Lower Pleistocene and older.	Right lateral movement apparent on easterly and southwesterly, steeply dipping, en echelon faults.(1)	Early (lower) Pleistocene.(1)	Deformation ceased prior to late Pleistocene.(1) Pre-Quaternary.(4) Pre-Holocene faulting.(5)
Sheep Hole	20 miles southwest(6)	5.5 miles.(6) 21.6 miles(3) with extension buried by alluvium.	Fault places plutonic rocks against lower Pleistocene alluvium. Brecciated vein quartz (2m thick) identifies fault plane that dips 75° southwest, fault strikes northwest. Dextral(1) movement of 1.2 to 2.5m, movement decreases in south end of the fault.	Lower Pleistocene and older.(1)	Rejuvenation along healed fault plane.(1)	Lower Pleistocene.	Early/Late Pleistocene for end of deformation.(1) Early Quaternary.(4) Pre-Holocene faulting.(5)

(1) Howard, Keith A., and David M. Miller. *Late Cenozoic Faulting at the Boundary between the Mojave and Sonoaran Blocks: Bristol Lake Area, California, in Deformation Associated with Neogene Eastern California Shear Zone*, S. M. Richard, editor, p. 37-47, 1992.

(2) Rosen, R.R. *Sedimentologic, Geochemical and Hydrologic Evaluation of an Intracontinental Closed-Basin Playa/Bristol Dry Lake, California: A Model for Playa Development and Its Implications for Paleoclimate.* Ph.D. Dissertation, University of Texas, Austin, Texas, 266 p. 1989.

(3) California Division of Mines and Geology (CDMG). *Fault Map of California,* 1975.

(4) CDMG. *Preliminary Fault Activity Map of California*, Open-File Report 92-03, 1992.

(5) Pre-Holocene faulting for purposes of California Code of Regulations (CCR), Title 23, Chapter 15.

(6) CDMG. *Fault and Geologic Maps of California*, Bulletin 201, 1985

(7) CDMG. *Geologic Map of California,* Needles Sheet, 1963.

(8) CDMG. *Geologic Map of California,* San Bernardino Sheet, 1967.

(9) Karlstrom, K. E., and others. *Pluton emplacement Along an Active Ductile Thrust Zone, Piute Mountains, Southeastern California: Interaction Between Deformation and Solidification Processes,* GSA Bulletin, v. 105, p. 213-230, 1993.

TABLE E.2

SUMMARY
REVIEW OF VICINITY FAULTING
BOLO LANDFILL
(Continued)

FAULTS	DISTANCE AND DIRECTION FROM SITE	LENGTH OF FAULT (mapped)	DESCRIPTION OF FAULT AND/OR FAULT PLANE	ROCK UNITS AFFECTED	DESCRIPTION OF DEFORMATION	AGE OF YOUNGEST UNIT OFFSET	ACTIVITY STATUS
Cleghorn Lakes	18 miles southwest(3)	16 miles.(3)(7)	Northwest striking fault zone, 500 m wide with gouge and breccia along en echelon planes. Eastern most plane dips 46° northeastward. Early Pleistocene deformed alluvium faulted against granite bedrock, upper Pleistocene unit covers fault, average dip of faults equals vertical.(1)	Lower Pleistocene north/south of Sheep Hole Pass. Possibly upper Pleistocene 5km south of pass, however overlying Holocene deposit undeformed.(1)	Gouge/breccia in 500 m wide fault zone, up to 3km right-lateral movement.(1)	Lower Pleistocene, possibly upper Pleistocene.(1)	Early/Late Pleistocene for end of deformation.(1) Early/Late Quaternary.(4) Pre-Holocene faulting.(5)
Cleghorn Pass	23 miles southwest	10 miles.(6) 13 miles.(1) 8 miles.(6)	Northwest striking fault zone 1km wide north of Cleghorn Pass. North of Cleghorn Pass lower Pleistocene alluvium dips 25° into fault that dips 75° west, with 50m offset. In Cleghorn Pass, fault zone cuts lower Pleistocene deposit, but undisturbed upper Pleistocene and Holocene cover fault. South of Pass 3 to 5m thick mylonite in fault that dips 60° west. Dextral offsetting may be 16km.	Lower Pleistocene and older units.	En echelon fault planes with mylonite, gouge, breccia. Lower Pleistocene deposit deformed.	Lower Pleistocene.(1) Early Quaternary.(6)	Deformation ceased prior to upper Pleistocene.(1) Early Quaternary.(4) Pre-Holocene faulting.(5)
Ludlow	16.0 miles west(3)(7)	44.5 miles.(3)(4)(7)(8) 47 miles.(4)	Northwest strike, lower and/or upper Pleistocene deformed, Holocene unit overlying not cut by fault. Geomorphology suggest faulting continued into upper Pleistocene.(1) Faulting during past 1,600,000 years.(4) Several magnitude 4.0 to 5.9 earthquake epicenters plot along fault trace.(6) Greater than 6km dextral offset of deposits.(1)	Upper Pleistocene.(1)	Dextral movement >6km. Historic/Recorded earthquakes.	Upper Pleistocene.	Potentially active per CDMG.(4) Deformation of geologic deposits ceased late Pleistocene/early Holocene.(1) Pre-Holocene/Holocene faulting.(5)
Broadwell Lake	17.5 miles northwest(7) 18 miles northwest(1)	26 miles.(3)	Defined by an air photo interpretation.(1) Short discontinuous faults.(7)(8)(3)(4) Northwest trend, dip northeastward, striations indicate dip slip. Dextral offset of up to 6km in Lava Hills. In Lava Hills faults with breccia gouge and crush zones; lower Pleistocene unit offset while upper Pleistocene overlies and is unbroken.(1)	Lower Pleistocene and older.	Breccia, gouge, crushed zones in bedrock, up to 6km dextral movement.	Lower Pleistocene.	Deformation ceased prior to upper Pleistocene.(1) Pre-Quaternary(4) Pre-Holocene faulting.(5)

(1) Howard, Keith A., and David M. Miller. *Late Cenozoic Faulting at the Boundary between the Mojave and Sonoaran Blocks: Bristol Lake Area, California,* in *Deformation Associated with Neogene Eastern California Shear Zone*, S. M. Richard, editor, p. 37-47, 1992.

(2) Rosen, R.R. *Sedimentologic, Geochemical and Hydrologic Evaluation of an Intracontinental Closed-Basin Playa/Bristol Dry Lake, California: A Model for Playa Development and Its Implications for Paleoclimate.* Ph.D. Dissertation, University of Texas, Austin, Texas, 266 p. 1989.

(3) California Division of Mine and Geology (CDMG). *Fault Map of California,* 1975.

(4) CDMG. *Preliminary Fault Activity Map of California*, Open-File Report 92-03, 1992.

(5) Pre-Holocene faulting for purposes of California Code of Regulations (CCR), Title 23, Chapter 15.

(6) CDMG. *Fault and Geologic Maps of California*, Bulletin 201, 1985

(7) CDMG. *Geologic Map of California,* Needles Sheet, 1963.

(8) CDMG. *Geologic Map of California,* San Bernardino Sheet, 1967.

(9) Karlstrom, K. E., and others. *Pluton emplacement Along an Active Ductile Thrust Zone, Piute Mountains, Southeastern California: Interaction Between Deformation and Solidification Processes,* GSA Bulletin, v. 105, p. 213-230, 1993.

TABLE E.2

SUMMARY
REVIEW OF VICINITY FAULTING
BOLO LANDFILL
(Continued)

FAULTS	DISTANCE AND DIRECTION FROM SITE	LENGTH OF FAULT (mapped)	DESCRIPTION OF FAULT AND/OR FAULT PLANE	ROCK UNITS AFFECTED	DESCRIPTION OF DEFORMATION	AGE OF YOUNGEST UNIT OFFSET	ACTIVITY STATUS
South Bristol Mountain	6 miles northwest(3)(4) 8 miles northwest(7) 6.8 miles northwest(1)	25 miles.(7)(8) 20.4 miles.(3) 20 miles.(4) 27 miles.(1)	Short-discontinuous faults.(3)(4)(7)(8) Continuous fault with northwest strike, dips to southwest and up to 6.5km dextral offset. Breccia zones in bedrock up to 10 m wide, lower Pleistocene alluvium dips 60° near faults. Lower Pleistocene alluvium and lowest part of upper Pleistocene alluvium cut by fault.(1)	Upper Pleistocene and older.	Breccia, deformed lower portion of upper Pleistocene alluvium, up to 6.5km dextral movement.	Upper Pleistocene.(1)	Deformation ceased during upper Pleistocene.(1) Pre-Quaternary.(3)(4) Pre-Holocene faulting.(5)
Bristol-Granite Mountains	To Marble Mountains 9.6 miles north.(1) To Old Dad Mountains 16 miles north.(7) To Northern Bristol Mountains 33 miles north.(7)	From Marble Mountains 37 miles.(1) From Old Dad Mountains 28 miles.(3) 26.5 miles.(4) From northern Bristol Mountains 11 miles.(3) 9.3 miles.(1) 8.5 miles.(4)	Northwest striking fault. In northern Bristol Mountains 2km wide fault zone with brecciation along vertical, reverse and thrust planes; upper Pleistocene deposits cut, Holocene overlies fault and is undisturbed. Between Old Dad and Granite Mountains, fault is 5 m wide and dips 70 to 80° northeast in bedrock. Units indicate reverse movement has occurred along plane. In Marble Mountains, the northwest striking, linear mountain front suggest southward continuation of this fault.(1) Fault identified in Bristol Mountains and between old Dad and Granite Mountains only.(1)(3)(7) Dextral deformation of units across fault is <10km, possibly <2km.(1)	Upper Pleistocene and older bedrock.	A 2 km zone with breccia along vertical, reverse, and thrust planes in northern Bristol Mountains. 5m wide, reverse fault in Old Dad/Granite Mountains. Up to 10m of dextral movement across planes.	Upper Pleistocene in northern Bristol Mountains.	Deformation ceased after upper Pleistocene.(1) Pleistocene deformation in Northern Bristol Mountains, Pre-Quaternary in Old Dad Mountains.(4) Pre-Holocene faulting.(5)
Fenner Wash	12 miles to east.	7.5 miles.	Not plotted on state/federal geologic maps published as late as 1992. Fault plotted in (9) as en echelon, northeast trending, normal (northwest side down); fault has offset pre-Cambian and early Paleozoic units, fault appears to be covered by alluvium.	Lower Paleozoic, pre-Cambian.	Normal, north side down.	Lower Paleozoic.	Inactive, unless direct evidence for more recent (geological) movement.(9) Pre-Holocene faulting.(5)

91-109 (7/8/94/jtw)

(1) Howard, Keith A., and David M. Miller. *Late Cenozoic Faulting at the Boundary between the Mojave and Sonoaran Blocks: Bristol Lake Area, California,* in *Deformation Associated with Neogene Eastern California Shear Zone*, S. M. Richard, editor, p. 37-47, 1992.

(2) Rosen, R.R. *Sedimentologic, Geochemical and Hydrologic Evaluation of an Intracontinental Closed-Basin Playa/Bristol Dry Lake, California: A Model for Playa Development and Its Implications for Paleoclimate.* Ph.D. Dissertation, University of Texas, Austin, Texas, 266 p. 1989.

(3) California Division of Mine and Geology (CDMG). *Fault Map of California,* 1975.

(4) CDMG. *Preliminary Fault Activity Map of California*, Open-File Report 92-03, 1992.

(5) Pre-Holocene faulting for purposes of California Code of Regulations (CCR), Title 23, Chapter 15.

(6) CDMG. *Fault and Geologic Maps of California*, Bulletin 201, 1985

(7) CDMG. *Geologic Map of California,* Needles Sheet, 1963.

(8) CDMG. *Geologic Map of California,* San Bernardino Sheet, 1967.

(9) Karlstrom, K. E., and others. *Pluton emplacement Along an Active Ductile Thrust Zone, Piute Mountains, Southeastern California: Interaction Between Deformation and Solidification Processes,* GSA Bulletin, v. 105, p. 213-230, 1993.